Examining the Potential for Racial/Ethnic Disparities in Use of Force

During NYPD Stop and Frisk Activities

by

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ABSTRACT

Since the 1990s, stop and frisk activities have been a cornerstone of the New York Police Department (NYPD). The manner in which the NYPD has carried out stop, question, and frisks (SQFs), however, has been a focal point of discussion, resulting in public outrage and two major lawsuits. Recently, the Federal District Court Judge ruled that the NYPD was engaging in unconstitutional stop-and-frisk practices that targeted predominately Black and Latino New Yorkers. Questions surrounding the NYPD's SQF practices have almost exclusively focused on racial and ethnic disproportionality in the rate of stops without necessarily considering what transpired during the stop. This study will fill that void by examining the prevalence and nature of use of force during those stops, along with testing the minority threat hypothesis. By combining micro-level measures from the NYPD's 2012 "Stop, Question, and Frisk" database with macro-level variables collected from the United States Census Bureau, the current study examines police use of force in the context of SQF activities. The results should help judges, policy makers, police officers, and scholars understand the nature of police use of force in the context of SQFs.

DEDICATION

I would like to dedicate this dissertation to my parents James and Bonnie Morrow who

raised me in a manner that condemned prejudicial attitudes and discrimination and

promoted equality in the broadest sense.

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Although there are many individuals I could acknowledge, I will keep my list confined to those who played an integral role in the completion of my dissertation and my successful matriculation through the doctoral program at Arizona State University. First, the completion of this dissertation would not have been possible without the support, mentorship, friendship, and devotion of Dr. Michael White, my Committee Chair, and Drs. Xia Wang, Danielle Wallace, and Henry Fradella, my Dissertation Committee Members. Moreover, their insight and dedication has helped me develop myself as a scholar substantively, theoretically, methodologically, and analytically. Second, I would like to thank Marcus Galeste, Sam Vickovic, Lisa Dario, John Shjarback, and Matt Larson for their humor and friendship. Without them, I may have lost my mind. Lastly, I would like to thank my mom, dad, brother, and family for their love and support.

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CHAPTER 1

INTRODUCTION

Burdened with a "vast and unmanageable social domain" (Manning, 1978, p. 95), police

officers have taken on multiple roles in society (Eck & Rosenbaum, 1994; Eck &

Spelman, 1987; Goldstein, 1979, 1990; Greene, 2000; Kelling & Moore, 1988; Manning,

1978, 1992; Wilson & Kelling, 1982). Despite a mission that lacks consistency, there is

one defining feature of the police: they have the authority to use force (Bittner, 1970,

1974; Muir, 1977). As a way to fulfilling their amorphous role in society (e.g., law

enforcement, crime prevention, order maintenance, etc.), police are legally prescribed the

authority to use force in order to protect themselves and others. Having such authority,

however, comes with significant scrutiny. Because they are given the discretion to use

force, there is also the potential for police officers to misuse or abuse their authority

(Dunham & Alpert, 1997). Considering that law enforcement practices have historically

been "conditioned by broader social forces and attitudes—including a long history of

racism" (Williams & Murphy, 1990, p. 28), there may be reason to believe that force is

used disproportionately against ethnic minority communities. In fact, research tends to

support the notion that policing practices (i.e., use of force) are racially biased towards

African Americans and Latinos (Goldkamp, 1976; Reiss, 1980; Sparger & Glacopassi,

1992; Terrill & Mastrofski, 2002; Walker, Spohn, & Delone, 2012). To date, however,

most research examining police use of force focuses on the suspect's race without

considering the larger ecological context in which he or she is embedded (but see Terrill

& Reisig, 2003). Such research is critically needed as many police officers dismiss the

existence of racially biased policing, and instead, promulgate that such racial disparities

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are nothing more than the artifact of policing high crime areas in which Blacks and Latinos committed the majority of crime (*Floyd et al. v. The City of New York* , 2013).

Although research and national estimates suggest that police use of force is a rare event (Adams, 1999; MacDonald et al., 2003; Westmarland, 2001; Worden & Catlin, 2002), it still occurs in approximately 1.4 percent of all police-citizen encounters, whereby police may use excessive force (Eith & Durose, 2011). Given the volume of encounters between police and citizens, this roughly translates into 560,000 police use of force incidents each year, or 1,534 incidents each day (Eith & Durose, 2011). Regardless of its "infrequency," there are still a number of far-reaching consequences associated with police use of force. Foremost, police use of force is the most extreme form of police authority. In the process of subduing a suspect physically there is the possibility that the altercation ends in serious injury or death (e.g., force is used in 20 percent of all arrests; see Hickman, Piquero, & Garner, 2008). Such an issue is particularly concerning if police officers misuse their authority. As the Human Rights Watch (1998) states,

> Police abuse remains one of the most serious and divisive human rights violations in the United States. The excessive use of force by police officers, including unjustified shooting, severe beatings, fatal choking, and rough treatment, persists because overwhelming barriers to accountability make it possible for officers who commit human rights violations to escape due punishment and often to repeat their offense. (p. 25)

Even when used judiciously (i.e., the force employed should be proportional to the circumstantial threat), police use of force may still cause injury to the citizen, depriving him or her of "life, liberty, and the pursuit of happiness." As a result, there may be community upheaval and a negative public image associated with the police, such as that witnessed in the Ferguson incident (Alpert & Dunham, 2010; Fyfe, 1988). Considering

the importance of maintaining a positive relationship with the community in order to uphold law and order (Sunshine & Tyler, 2002; Tyler, 1990, 2004), force may undermine police legitimacy because police-citizen cooperation and perceptions of legitimacy requires a "high level of trust between police and citizens" (Eck & Rosenbaum, 1994, p. 18). Hence, employing various forms of force, even if done so judiciously, may serve to dissolve the established trust between police and citizens, rendering law enforcement efforts to be less than ideal.

Given the frequency and serious consequences that accompany police use of force, for more than 40 years researchers have sought to examine the various factors associated with force in an attempt to better understand the phenomenon and to reduce the likelihood that it occurs (Prenzler, Porter, & Alpert, 2013). The research that exists on factors related to police use of force tends to center around four different domains: suspect characteristics (Engel et al., 2000; McCluskey et al., 2005; Paoline & Terrill, 2007; Terrill & Mastrofski, 2002), officer characteristics (Kop & Euwema, 2000; Lawton, 2007; McElvain & Kposowa, 2008; Paoline & Terrill, 2004), encounter-level characteristics (Garner et al., 2002; McCluskey & Terrill, 2005; Sun & Payne, 2004; Terrill et al., 2003), and departmental characteristics (Alpert & MacDonald, 2001; Friedrich, 1980; Hickman & Piquero, 2007). Although research on these four areas has provided greater insight into police use of force, these factors do not exist in a vacuum. Instead, individual- and departmental-level predictors of police use of force are influenced by the larger ecological context in which they are embedded. To date, however, research examining the effect of macro-level factors on police use of force is relatively scarce. In fact, research on the ecology of police use of force is such a new area

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of focus that fifteen years ago Adam (1999) did not acknowledge it in his review about *What We Know about Police Use of Force*.

Since Adam's (1999) review of police use of force, a few studies have emerged examining the ecological, or neighborhood, context in which force is employed. The research suggests that communities comprised of racial and ethnic minorities and members of lower socioeconomic status experience police use of force at higher rates than whites and/or those of higher economic status, including deadly force (Reiss, 1980; Smith, 1986; Sparger & Glacopassi, 1992; Terrill & Mastrofski, 2002). In an attempt to explain these differences, various explanations for the disproportionate use of force among racial and ethnic minority neighborhoods have been put forth by scholars (e.g., Werthman and Piliavin's (1967) ecological contamination hypothesis, Klinger's (1997) vigor hypothesis). The *minority threat hypothesis* proposes that crime control efforts and the allocation of resources vary by the racial/ethnic composition of places because the dominant group (i.e., Whites) seeks to protect their power and privilege from those areas considered a "problem population"—ethnic minorities (Chambliss & Seidman, 1971; Holmes, 2000; Jackson, 1989; Liska, 1992; Quinney, 1980; Smith & Holmes, 2003; Spitzer, 1975; Stultz & Baumer, 2007; Turk, 1966). Under this framework, therefore, police use of force is not only a way to ensure compliance with the law, but also a mechanism for preserving the social order or current status quo for the political elite. To date, numerous studies have documented a relationship between minority representation and various policing outcomes (Brandl, Chamlin, & Frank, 1995; Chamlin, 1990; Greenberg et al., 1985; Kane, 2003; Liska et al., 1981; Nalla, Lynch, & Leiber, 1997). Jackson and Carroll (1981), for example, found that a city's racial composition,

frequency of riots in the 1960s, and level of black mobilization activity were significant predictors of police expenditures (see also Jackson, 1986). Whether such ethnic minority-related predictors are associated with police use of force is still underdeveloped in the policing literature.

The current study frames police use of force in terms of the minority threat perspective. Although police officers are thought to be apolitical, their occupational mandate is politically defined and they function in a public political arena (Manning, 1978). Most notably, Manning (1978) stated the factors that influence the administration of law "all reflect the political organization of society. The distribution of power and authority, for example, rather than the striving for justice, or equal treatment under the law, can all have a direct bearing on enforcement" (Manning, 1978, p. 106). In line with the minority threat perspective, the police may be a political mechanism through which the majority group in society (i.e., Whites) maintains their power and privilege by subjecting minority groups to greater formal social control, such as through police use of force. As Croft (1985) states, "questions of how and why police use force, therefore, are central…to the broader political issues of the proper role and function of government in a modern democratic society" (p. 232).

In order to determine the theoretical applicability of the minority threat hypothesis while simultaneously investigating the effect of neighborhood-level characteristics on police use of force, the current study examines police use of force in the context of stop, question, and frisk (SQF) activities using data collected by the New York Police Department (NYPD). Although the NYPD has touted the effectiveness of SQFs as reducing crime in New York City, it has generated considerable criticism from the

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community, especially by legal scholars, civil rights activists, and racial/ethnic community members. By the end of the 1990s, SQF procedures became a point of contention among ethnic minorities because they were being disproportionately stopped and frisked by the NYPD. As Fagan, Geller, Davies, and West (2010) indicated, "[i]n a fifteen-month period from January 1998 through March 1999, non-Hispanic Black, Hispanic Black, and Hispanic White New Yorkers were three times more likely than their White counterparts to be stopped and frisked on suspicion of weapons or violent crimes" (p. 310). Consequently, the NYPD's SQF tactics have been a centerpiece of controversy, resulting in multiple lawsuits over the last decade. In the most recent case (*Floyd et al. v. The City of New York*, 2008), the Center for Constitutional Rights (CCR) challenged the NYPD's use of SQF under the Fourth Amendment and alleged that officers were selectively targeting individuals on the basis of their race and national origin without reasonable suspicion, a violation under the Equal Protection Clause of the Fourteenth Amendment. Ultimately, a federal district court judge ruled that the NYPD was engaging in unconstitutional stop and frisk practices that targeted predominately black and Latino New Yorkers and ordered a number of changes to be implemented in the near future.

Questions surrounding the NYPD's SQF practices have almost exclusively focused on racial disproportionality in the rate of stops without necessarily considering what transpired during the stop. In *Terry v. Ohio* (1968), the U.S. Supreme Court held that the Fourth Amendment to the U.S. Constitution requires police to have *reasonable, articulable suspicion* that a person may be involved in criminal activity before they may lawfully conduct a brief, limited, investigatory detention—otherwise known as a *stop* (see Ferdico, Fradella, & Totten, 2015). The Court also held that officers may "pat

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down" or *frisk* a detained person if there is *reasonable, articulable suspicion* that they

person may be "armed and dangerous" (*Terry v. Ohio*, 1968, p. 27). Reasonable,

articulable suspicion is "considerably less than proof of wrongdoing by a preponderance

of the evidence" and "is obviously less demanding than that for probable cause" (*United

States v. Sokolow*, 1989, p. 7). On the other hand, mere hunches do not constitute

reasonable suspicion (Ferdico, et al., 2015). Officers "must be able to point to specific

and articulable facts which, taken together with rational inferences from those facts,

reasonably warrant that intrusion" (*Terry v. Ohio*, 1968, p. 21). Although a wide variety

of factors may lawfully be considered under the "totality of the circumstances" that give

rise to reasonable suspicion, the race, ethnicity, or national origin of a suspect are not

legitimate factors upon which reasonable suspicion may be formulated (Ferdico, et al.,

2015).

   Terry v. Ohio and other U.S. Supreme Court cases in its progeny (e.g., *Sibron v.

New York*, 1968) may have underestimated whether the benefits of the SQF offset the

potential costs, which may include racial profiling, deprivations of liberty, and the most

extreme form of police authority—use of force. This study will fill that void by

examining the prevalence and nature of use of force during those stops. More

specifically, this dissertation seeks to answer three important questions related to the

intersection of racial profiling, deprivations of liberty, and police use of force. First,

which factors predict use of force across suspect, situational, departmental, and

ecological levels of analysis? Second, after controlling for the appropriate micro- and

macro-level variables, do police officers use force more often in predominately minority

neighborhoods? And third, does an individual's race/ethnicity interact with the

racial/ethnic composition of a police precinct to produce disparities in police use of force?

The answers to these research questions are of significant importance in a number of spheres. First and foremost, the results should help judges, policy makers, and scholars understand the nature of SQF practices. This, in turn, can help to clarify the permission scope of reasonable, articulable suspicion for law enforcement officers, judges, and policy makers. Second, if the police, judges, and policy makers act on the data appropriately, they may be able to formulate practices that increase public safety (which was *Terry*'s intent) while simultaneously increasing respect for suspects' constitutional rights. Such outcomes could increase citizen perceptions of police legitimacy. Lastly, the results will provide empirical evidence that either support or refute the theoretical applicability of the minority threat perspective to police use of force in the context of SQFs. These findings will broaden current discourse on the theoretical implications of the minority threat perspective.

CHAPTER 2

LITERATURE REVIEW

The examination of police use of force is a complex area of study. In order to better understand the phenomenon, this chapter consists of six sections. The first two sections are dedicated to outlining the many roles that the police occupy, which ultimately requires them to develop a coping strategy (i.e., police subculture). Within this context, the third section highlights how police use of force is not only a necessary tool to ensure police and citizen safety, but also a defining feature that reinforces the "us vs. them" mentality amongst police officers. The fourth section then examines prior research on police use of force as it relates to suspect, officer, encounter-level, departmental, and neighborhood characteristics. Then, the minority threat hypothesis is proposed as a viable framework for understanding ecological variations in police use of force. Finally, the chapter ends with a brief discussion on *Terry* stops and the potential for racial profiling and use of force to occur during those stops.

The Role of the Police

With extensive labor markets, the specialization of individuals to specific tasks and roles is often facilitated through the division of labor. For example, whereas a public attorney serves his or her clientele in court, a pharmacist distributes medicine to individuals on the basis of a doctor's medical expertise. Despite their differences, both professions have an occupational mandate, or a legally defined right, to carry out duties upon which no one else may encroach. The scope of an occupational mandate generally "reflects the concerns society has with the services it provides, with its organization, and with its effectiveness" (Manning, 1978, p. 95). Such concerns are particularly

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pronounced among the police occupation because they are assigned the difficult task of providing society with multiple services, which includes crime fighting (Manning, 1978, 1992), peacekeeping (Greene, 2000; Kelling & Moore, 1988; Wilson & Kelling, 1982), service delivery (Eck & Rosenbaum, 1994), problem solving (Eck & Spelman, 1987; Goldstein, 1979, 1990), and dispensing force (Bittner, 1970, 1974; Muir, 1977). Given the breadth of police work, Manning (1978) concluded that their occupational mandate is best characterized as embodying "a vast and unmanageable social domain" (p. 95).

Unlike other professions that construct their own occupational roles, the police mandate is largely dictated by the public's image of law enforcement. Although the public may be generally unaware of the nature of police work, it is cognizant of the small portion of police work that involves elements of danger and excitement: "To much of the public, the police are seen as alertly ready to respond to citizen demands, as crime-fighters, as an efficient, bureaucratic, highly organized force that keeps society from falling into chaos" (Manning, 1978, p. 95). In an attempt to fulfill the public's perceptions and maintain their confidence in law enforcement, the police seek to idealize their heroic conceptions related to danger and excitement. The consequence of idealizing or exaggerating the police role for the sake of appearance, however, is that the public continues to demand even more out of the police, meaning their occupational mandate is persistently expanding and influencing the police organization.

Despite stereotypes and popular images of the police, crime fighting is only a small portion of their work (Bittner, 1970; Brown, 1981; Wilson, 1968). Although various categorizations exist (Black & Reiss, 1967; Brown, 1981; Manning, 1978), Wilson (1968) best captures the true nature of police work using his dichotomy. On one

hand, police work revolves around law enforcement. Such work usually includes the application of legal sanctions for the violation of law. In many of these scenarios, there is a clear culprit and a transparent solution. On the other hand, most of police work is what Wilson (1968) calls order maintenance—"the handling of disputes, or behavior which threatens to produce disputes, among persons who disagree over what ought to be right" (p. 407). In order-maintenance situations, an arrest is usually not made. Instead, police officers must act as arbitrators or "street-level bureaucrats," whereby police officers must display tremendous discretion to alleviate tension between the parties and mitigate the possibility that the dispute escalates into a legally defined offense, while simultaneously abiding by formal and informal organizational pressures (Brown, 1981; Worden, 1989).

Although their roles vary, there is uniform agreement that police officers are supposed to maintain personal and societal safety on a daily basis. In order to secure such safety and carry out their boundless occupational mandate, police officers must rely upon their authority to resolve problems in society.

> [W]hether it involves protection against an undesired imposition, caring for those who cannot care for themselves, attempting to solve a crime, helping to save a life, abating a nuisance, or settling an explosive dispute, police intervention means above all making the use of capacity and authority to overpower resistance to an attempted solution in the native habitat of the problem. (Bittner, 1970, pp. 126-127)

Specifically, police officers are granted the authority to use force as a means to achieve their vast and unmanageable social domain. For this reason, Bittner (1970) suggests that "the role of the police is best understood as a mechanism for the distribution of non-negotiably coercive force employed in accordance with the dictates of an intuitive grasp of situation exigencies" (p. 131). Fulfilling their role as force dispensers, however, is not

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an easy feat as the public expects the police to perform their duties in a responsible, reasonable, and professional manner that does not violate the law or abuse the citizenry they are sworn to protect. The demanding nature of the police occupation is one of the reasons why police officers must establish a culture that separates them from the citizens they protect and serve.

The Development of a Police Subculture

Similar to doctors, lawyers, and teachers, police officers develop an occupational or "working personality" (Skolnick, 1966). Although all police officers are not alike in their "working" personality," research suggests that they share similar and distinctive cognitive inclinations as an occupational group (Lefkowitz, 1975; Lundman, 1974; Manning, 1977; Paoline, 2004; Thibault et al., 1985; Twersky-Glasner, 2005; Westley, 1970). These cognitive frameworks and tendencies are often due to job-related dangers, the need to exert authority, the pressures associated with upholding the law, and the organizational structure. Because police officers are faced with such a unique combination of social elements, they tend to hold a distinct perspective or worldview through which they see situations and events. As Kappeler, Sluder, and Alpert (1998) state, "[t]he concept of *worldview* refers to the manner in which a culture sees the world and its own role and relationship to the world" (p.88). Hence, understanding these cognitive predispositions is essential as police officers are required to maintain order in a democratic society, whereby their paramilitary training and organizational identity must be balanced with the social environment in which citizens' hold freedoms (Skolnick, 1966).

The development of a police officer's occupational personality cannot be understood without giving attention to the division of labor in a police department and his or her corresponding work assignments. As Skolnick (1966) states, "the uniformed 'cop' is seen as the foundation for the policeman's 'working personality'" (p. 16). Although a police officer's "working personality" evolves and differs (to a certain degree) based on his or her position in the police department, all police officers generally begin the trajectory of their occupational personality in the academy, which further develops as they are mentored by senior officers on the beat. Unlike the military where someone can join at the rank of lieutenant with the appropriate educational credentials, police officers acquire rank through apprenticeship as patrolmen or women. Consequently, this "ground-up" approach provides police officers with a universal backdrop of constabulary experience that shapes the way that they look at the world and carry out the law (Bittner, 1970; Westley, 1953).

The acquisition of a police officer's "working personality" on the beat is intimately tied to three factors: suspicion, danger, and authority (Skolnick, 1966). The suspicious nature of police officers is often a byproduct of the recurrent themes of danger found in police "folklore" or "legends" (Balch, 1972). These stories, however, are not without merit as there are instances when police officers are shot and killed during routine traffic stops (e.g., writing a ticket) and other relatively minor law violations. Outside of these anomalies, police work is still a very dangerous occupation. Research examining nonfatal-police injuries suggests that police departments report the highest rates of injury by form of assault. Specifically, the police are 73.1 times more likely to be assaulted in their occupation than the overall industry average (Peek-Asa, Howard,

Vargas, & Kraus, 1997). Given the potential for danger, police officers must be acutely cognizant and suspicious of their surroundings and exert their authority to protect themselves and others in dangerous situations.

Not only does this heightened sensitivity to danger make police officers overtly suspicious in nature, but it also isolates them socially from citizens regarded as "symbolically dangerous," along with those abiding by conventional standards (Hunt, 1985; Skolnick, 1966; Westley, 1953). Moreover, the element of authority further exacerbates the isolation of police officers from citizens because they are "required to enforce laws representing puritanical morality, such as prohibiting drunkenness, and also laws regulating the flow of public activity, such as traffic laws," even though they do not necessarily subscribe to or abide by such codes (Skolnick, 1966, p. 16). As a result, the general public may garner animosity towards the police, which is displayed through the deprecation of police authority and the emphasis citizens place on apprehending dangerous or "real" criminals. Altogether, the combination of being placed in dangerous situations with the affront that some citizens display towards their authority causes police officers to label citizens into various categories (i.e., "suspicious persons," "assholes," "know nothings"), which further fortifies the element of police isolation and necessitates the ideology of police solidarity (Van Maanen, 1978).

The joint effect of suspicion, danger, and authority on police isolation has the unintended effect of unifying police officers in their everyday work and worldview—an esprit de corps (Bittner, 1970; Kappler et al., 1998; Westley, 1953). Because the public often lacks support for the police and orients itself in an apathetic manner towards their work, police officers find unity along a number of commonalities. First, police officers

find solidarity in their authority. Regardless of their personal outlook on certain codes and laws, "the fact that a man [(i.e., police officer)] is engaged in enforcing a set of rules implies that he also becomes implicated in affirming them" (Skolnick, 1966, p. 26). In upholding their responsibilities, therefore, police officers may generate and reinforce the perception that the general public is an enemy, which isolates them from the citizens they serve and protect. The social isolation from the public is problematic because it negatively affects public relations, eroding citizens' respect, trust, cooperation, and understanding of police work—all elements that are integral to maintaining police legitimacy (Sunshine & Tyler, 2003; Tyler, 1990, 2004; Tyler & Huo, 2002). In turn, police may resent the public for taking them for granted, and therefore, seek out one another as a support system both in and out of the work environment.

Second, officers' work often involves dangerous situations, which brings them together as a group but demarcates them from the general public. On a regular basis, police officers are placed in locations within the community where they are required to respond to crimes against people and property. Because they are constantly situated in potentially threatening environments and exposed to humanity at its worst (Muir, 1977), police officers develop a perceptual shorthand that associates certain types of gestures, languages, and attire with specific kinds of people that are perceived as "symbolic assailants" (Hunt, 1985; Kappler et al., 1998; Skolnick, 1966; Van Maanen, 1978). Although such cognitive shortcuts or suspicions may serve as a prelude to identify assailants, they only provide a superficial indication of danger that must not be mistaken for something that is necessarily predictable. The problem, however, is that "[t]he

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element of danger is so integral to the policeman's work that explicit recognition might induce emotional barriers to work performance" (Skolnick, 1966, p. 18).

The development of a police officer's working personality through the elements of suspicion, danger, and authority, along with the ensuing subculture that revolves around the themes of isolation and solidarity, help to shape the worldview embraced by many police officers. Due to this unique combination of social elements, police officers situate themselves in terms best described as "we/they" or "us/them" (Kappler et al., 1998). In other words, their world is composed of insiders (i.e., police) and outsiders (i.e., citizens). As an insider, the police find comfort in their conforming values and shared backgrounds, which provides them with a cognitive filter to determine who is suspicious or deviant and in need of state control. Having this outlook on society, however, only operates to (1) identify outsiders on the basis of ambiguous cues and stereotypes, and (2) reinforce the "cop-as-soldier" mentality whereby police officers perceive their role as soldiers in the war against crime (Skolnick & Fyfe, 1994). As a consequence, police plunge into an insurmountable war against crime that leads to frustration and demoralization. The resulting effect of these conditions is that police officers may seek to alleviate such frustration through engaging the "enemy"—often perceived as being young men from racial and ethnic minorities—especially those "on inner-city streets late at night" (Skolnick & Fyfe, 1993, p. 114; Van Maanen, 1978).

Use of Force: The Most Extreme Form of Police Authority

With nearly 18,000 state and local law-enforcement agencies employing over 730,000 officers, there is the potential that large segments of society may be subjugated to the vast authority of the police (Reaves, 2007). Although research and national

estimates suggest that police use of force is a rare event (Adams, 1999; MacDonald et al., 2003; Westmarland, 2001; Worden & Catlin, 2002), it still occurs in approximately 1.4 percent of all police-citizen encounters (Eith & Durose, 2011). In a recent interview-based survey conducted by the United States Department of Justice, it was found that approximately 16.9 percent of respondents aged 16 and over ($N \approx 60,000$) had contact with the police. Moreover, of that 16.9 percent, only 1.4 percent indicated that they had force "threatened or used against them during their most recent contact" (Eith & Durose, 2011, p. 12). Projecting these estimates at the national level, Eith and Durose (2011) propose that this amounts to approximately 574,000 police-citizen encounters in which police employed force each year. It should be noted that police use of force is much more likely to occur when an arrest is made. Combining the Police-Public Contact Survey with the Bureau of Justice Statistic's Survey of Inmates in Local Jails, Hickman and colleagues (2008) found that police use force in 20% of all arrests.

Over the course of performing their duties, police are placed in precarious situations where they must secure public safety. Whether the arrestee is suspected of a firearm-related crime or drug trafficking, police officers must often make split-second judgments about the immediate action necessary to control the situation (Fyfe, 1997). In doing so, however, police may take action that is later judged to be excessive. As Alpert and Dunham (2004) state, "one of the central problems [for police] is determining the level of force that is 'necessary' to make an arrest and to take a suspect into custody" (p. 18; see also Alpert & Smith, 1994). If the force used is deemed excessive or unwarranted, it may cause a social rift that undermines the relationship between the police and the citizens they serve. Moreover, even if force is legally proscribed given the circumstances

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and used judiciously, it may still be perceived as excessive because many citizens do not understand when force is warranted or what constitutes excessive force. Consequently, there may be a loss of trust that threatens the ability of police officers to function efficiently and effectively in society. In carrying out their duties, therefore, police officers are constantly challenged with a balancing act—determining the appropriate amount of force necessary in light of the unpredictable actions of citizens.

Determining the Appropriate Level of Force

In determining the appropriate level of force in a given scenario, it is important to delineate the difference between reasonable and excessive force, which is often a point of confusion among citizens. Generally, U.S. citizens are not concerned with police use of force that is necessary to apprehend a suspect who is physically resisting, but rather, those instances when police officers employ an excessive amount of force (Skolnick & Fyfe, 1993). Although police officers are granted the right to use reasonable force in situations where they either must protect themselves or citizens or make an arrest, there are clear limitations to the breadth of force.

Legal context. Even though it may be difficult to determine the appropriate level of force during a police-citizen encounter, the U.S. Supreme Court has offered some insight on the amount of force legally proscribed to control and apprehend a suspect. The level of force a police officer uses against a suspect is governed by the *Reasonableness Clause* of the Fourth Amendment (Ferdico, et al., 2015). The leading U.S. Supreme Court case interpreting this constitutional provision with regard to police use of force is *Tennessee v. Garner* (1985). In *Garner*, a community resident informed the police of a burglary that was taking place at her neighbor's house. When the officers arrived at the

neighbor's house, they found Edward Garner attempting to flee the scene until his path

was obstructed by a six-foot-high chain link fence. Upon reaching the fence, Garner

began to climb over the fence.

> With the aid of a flashlight, [the officer] was able to see Garner's face and hands. He saw no sign of a weapon and, though not certain, was "reasonably sure" and "figured" that Garner was unarmed. He thought that Garner was 17 or 18 years old and about 5'5" to 5'7" tall. While Garner was crouched at the base of the fence, [the officer] called out "police, halt" and took a few steps toward him. Garner then began to climb over the fence. Convinced that if Garner made it over the fence he would elude capture, [the officer] shot him. The bullet hit Garner in the back of the head. Garner was taken by ambulance to a hospital, where he died on the operating table. Ten dollars and a purse taken from the house were found on his body. (*Tennessee v. Garner,* 1985, pp. 3-4)

At the time of the incident, both Tennessee state law and applicable police

department policies permitted law enforcement officers to use deadly force to stop a

fleeing felon. Thus, under the so-called *fleeing felon rule* in effect at the time, the police

use of deadly force to apprehend Garner was permissible. Garner's father, however,

thought otherwise given the facts and circumstances of the case. The Garner family filed

a civil rights lawsuit under 42 U.S.C. § 1983, arguing that Tennessee state law and the

police department policies violated the Reasonableness Clause of the Fourth Amendment.

The U.S. Supreme Court agreed, reasoning that the "use of deadly force to prevent the

escape of all felony suspects, whatever the circumstances, is constitutionally

unreasonable" (*Tennessee v. Garner,* 1985, p. 11). In place of the fleeing felony rule, the

Court ruled that the totality of the circumstances at the scene of the crime must dictate

whether deadly force is "reasonable" under the Fourth Amendment. Police officers may

use deadly force in situations in which "the suspect poses a threat of serious physical

harm, either to the officers or to others" (*Tennessee v. Garner,* 1985, pp. 11-12).

The modern approach for determining a reasonable level of force, even deadly

force, is grounded in *Graham v. Connor* (1989). According to the Court, derivations of

excessive use of force are best analyzed under the Fourth Amendment's "objective

reasonableness" standard. As Chief Justice Rehnquist stated in his opinion of the Court,

> Determining whether the force used to effect a particular seizure is "reasonable" under the Fourth Amendment requires a careful balancing of the nature and quality of the intrusion on the individual's Fourth Amendment interests against the countervailing governmental interests at stake. (*Graham v. Connor*, 1989, p. 396)

Moreover, since each use-of-force case is unique to a particular set of facts and

circumstances, the Court acknowledged that the Fourth Amendment is not capable of

establishing a clear-cut definition of "reasonableness." Instead, "[t]he 'reasonableness' of

a particular use of force must be judged from the perspective of a reasonable officer on

the scene, rather than with the 20/20 vision of hindsight" (*Graham v. Connor*, 1989, p.

396). In short, each case must be judged upon the totality of its unique circumstances

(*Scott v. Harris*, 2007; *United States v. Cortez*, 1981; *United States v. Sokolow*, 1989).

The holdings of *Garner* and *Graham* translate into a few "rules of thumb" for

police use of force.

> A law enforcement officer . . . has the right to use a reasonable amount of nondeadly force to make an arrest…. [O]nly minimal force, such as that necessary to apply handcuffs, would be necessary to make an arrest of a cooperative suspect. However, the more a suspect resists, the more nondeadly force could be lawful used to make the arrest. . . .
> [Additionally,] deadly force may only be used by law enforcement officers in defense of their own lives (i.e., to prevent an imminent, unlawful attack that poses a risk of death of serious bodily harm to the officer); in defense of the lives of others (i.e., again to prevent an imminent, unlawful attack that poses a risk of death of serious bodily harm to a third party); and to stop the escape of a fleeing suspect if there is probable cause to believe that the suspect has committed a crime involving the infliction or threatened infliction of serious physical harm. (Ferdico, et al., 2015, p. 263-264)

The constitutional standards set forth in *Garner* and *Graham*, however, may operate to facilitate the reoccurrence of bad police decisions. As Fyfe (2010) points out, the equivocal reasonableness standard may be best understood in terms of a "split-second syndrome," whereby police actions are judged in the moment they decided to use force.

Because police decision-making is evaluated in moments of crises, it may serve "to inhibit the development of greater police diagnostic expertise and to provide after-the-fact justification for unnecessary police violence" (Fyfe, 2010, p. 475). Fyfe (2010) argues that there are three assumptions underlying these shortcomings. First, since each circumstance in which police employ force is different, there cannot be a uniform principle guiding its application. Second, due to the erratic and stressful nature of police work, poor judgment should be expected. Finally, because police conduct is assessed on a situational basis, the aftermath of any imprudent decision is deflected from the officer so long as it was the product of suspect provocation. Altogether, the consequences of these assumptions is that the split-second syndrome "lends approval to unnecessary violence, and to failure of the police to meet their highest obligation: the protection of life" (Fyfe, 2010, p. 477).

In order to avoid costly split-second decisions, Fyfe (2010) makes two major suggestions. First, police officers should survey the geographic area in which they patrol on foot in order to gain tactical knowledge (e.g., the environmental settings and the actors involved) of their environment. Based on this tactical knowledge, officers are able to construct resolutions to an incident prior to their arrival at a crime scene, alleviating the inclination for split-second decisions. Put simply, having tactical knowledge reduces the

uncertainties that police officers often face. Second, police officers should conceal both their intent and physical presence when responding to scenes of potential violence. By concealing themselves, police generally have a tactical advantage over the offender and can give that individual the opportunity to peacefully surrender. If these precautions are not taken and unnecessary violence is the result, police officers "should be condemned rather than rewarded with headlines, honors and medals" (Fyfe, 2010, p. 477).

      The social scientific context. The social scientific research examining how officers determine the appropriate level of force closely parallels the legal precedent outlined in *Graham* (1989). As Adams (1999) states, "the amount of force used should be proportional to the threat and limited to the least amount required to accomplish legitimate police action. Any force above and beyond this balance is excessive" (p.1). Hence, when evaluating the circumstances in a particular situation, police officers must make a determination about the perceived threat with regard to the suspect, which is often based on the immediate danger posed to themselves and the tactical situation. It should be noted that such judgments about the appropriate amount of force are often subjective, as police officers vary in their perceptions of danger (Adams, 1995; Alpert & Smith, 1994).

      Research suggests the type of force employed during an encounter is closely, if not directly, related to the level of suspect resistance. When determining the appropriate level of force in a given situation involving suspect resistance, police officers generally rely upon the concept of a "force continuum" (Garner, Schade, Hepburn, & Buchanan, 1995; Terrill, 2003, 2005). Built upon Bittner's (1970) notion that police force must be "situationally justified," the force continuum provides police officers with guidelines on the appropriate level of force that corresponds with the degree of resistance exhibited by

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the suspect. As McLaughlin (1992) states, "[a] force continuum…should provide a means for escalating force when the subject shows noncompliance and a means for de-escalating force when the subject complies" (p. 65). A central feature of the force continuum is its adherence to the concepts of proportionality and incrementalism.[1] Police officers are only expected to apply the amount of force that is proportional to the suspect's resistance. If the level of force does not result in the desired outcome (e.g., situational control), the force continuum specifies how to incrementally adjust to the situation. In fact, research examining the principles of proportionality and incrementalism has found that police officers jump the continuum in nearly 20% of nonresistant encounters with suspects and that they de-escalate the situation in approximately 75% of resistant encounters with suspects (Terrill, 2005).

Generally, departmental policy dictates the appropriate level of force along a continuum of encounter-level provocations. As Terril and colleagues (2003) state, "[o]ne consistent theme among law, public, and police policy is that the appropriate amount of police force is that which is reasonably necessary to achieve citizen compliance" (p. 151; see also Smith & Petrocelli, 2002). For example, the NYPD student-guide procedure states that "The amount of force [that an officer is] permitted to use must be carefully matched to the nature of the situation [that the officer] confronts and the danger it presents" (NYPD Police Academy, 2007a, p. 4). In order to ensure that officers use reasonable (rather than excessive) force, the NYPD established an "escalating scale of force" continuum that matches the appropriate level of force to the provocations of the

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[1] Compared to early research on force continuums that examined incrementalism as a linear function, more recent versions of the force continuum acknowledge the circular or transactional nature of police-citizen encounters.

circumstance. Although the use-of-force continuum varies by police department, the

NYPD's escalating scale of force in Table 1 provides an example of how officers are

supposed to respond under certain conditions.

Table 1

Escalating Scale of Force

Provocation or Condition	Appropriate Force Response
Imminent threat of death or serious physical injury	Use of deadly force, usually the firearm
Threat or potential of lethal assault	Draw or display firearm
Physical assault likely to cause physical injury	Use impact techniques (e.g., batons, fists, feet)
Threatened or potential physical assault that is likely to cause physical injury	Use oleoresin capsicum (OC), or pepper spray (less-than-lethal weapon)
Minor physical resistance, such as grappling, going limp, or pulling or pushing away	Use compliance techniques, such as wrestling holds and grips designed to physically overpower subjects or to inflict physical pain, which end when the technique is stopped and cause no lasting injury
Verbal resistance, such as failure to comply with directions	Use a firm grip, for example, arm or shoulder that causes no pain but it meant to guide someone (e.g., away from a fight, toward a police car)
Refusal to comply with requests or attempts at persuasion	Use a command voice: Firmly giving directions (e.g., "I asked for your license, registration, and proof of insurance, sir. Now I am telling you that, if you don't give them to me, I will have to arrest you.")
Minor violation or disorderly conditions involving no apparent threats to officers or others	Use spoken persuasion: Requests for compliance (e.g., "May I see your license, registration, and proof of insurance, sir?")
Orderly behavior in public places	Maintain a professional presence (e.g., the officer on post deters crime and disorder; the highway unit deters speeding)

SOURCE: NYPD Police academy (2007a, p. 7).

Factors Influencing Police Decisions to Use Force

Despite its infrequency, police use of force has far-reaching consequences, including serious injury or death, the deprivation of liberty, and the loss of police legitimacy. These concerns are particularly pronounced in disadvantaged communities because of the historically contentious relations between the police and ethnic minorities (Walker, 1997). Given the frequency and serious consequences that accompany police use of force, researchers have sought to identify the various factors associated with force in an attempt to better understand the phenomenon and to reduce the likelihood that it occurs (Prenzler, Porter, & Alpert, 2013). In general, these factors involve characteristics related to the suspect, officer, situation, organization, and ecological location.

Suspect Characteristics

Race/ethnicity. Early research examining racial disparities in police use of force primarily focused on police shootings or deadly force (Reiss, 1980). In the 1970s, for instance, the police were eight times more likely to fatally shoot African-Americans compared to Whites—a ratio that reduced to 4:1 by 1998 with the implementation of new policies (Walker, Spohn, & Delone, 2012). A significant portion of these deadly shootings were related to the old fleeing felon rule that was eventually abandoned with the U.S. Supreme Court's ruling in *Tennessee v. Garner* (1985). In a study that examined police shootings in Memphis, Sparger and Glacopassi (1992) found that more than half of all African-Americans shot and killed fell under the category of "unarmed and not assaultive," whereas only one White person fell under the same category (see also Fyfe, 1982). Undoubtedly, prejudices and stereotypes influence these disparities, whereby officers were more likely to feel threatened by African American suspects compared to

their white counterparts (Walker, Spohn, & Delone, 2012). Such disparities have led some scholars to conclude that the "police have one trigger finger for [B]lacks and another for [W]hites" (Takagi, 1979, p. 52; see also Goldkamp, 1976).

Research has similarly explored the relationship between suspect characteristics (race/ethnicity, gender, age, demeanor, and the use of drugs/alcohol) and less than lethal forms of force. Of these attributes, a significant amount of research has been dedicated to the impact of race on police use of force. Although the empirical evidence is mixed on the topic, numerous studies have reported that the suspect's race/ethnicity has an effect on an officer's decision to use force during the encounter. Using ordered probit models, Terrill and Mastrofski (2002) found that non-White citizens had a higher probability of having force used against them by the police, which included a greater chance of verbal commands and impact weapons. Similarly, Garner and colleagues (2002) found that Blacks were more likely to have force used against them than Whites in situations where there was no resistance. Although the effect of race/ethnicity has been demonstrated in studies, its magnitude or significance sometimes dissipates after controlling for certain variables (Kaminski et al., 2004; Mulvey & White, 2014; Paoline & Terrill, 2004, 2007; Terrill et al., 2008). In a methodologically rigorous study by Terrill and Reisig (2003), for example, the effect of race on police use of force vanished once neighborhood contextual factors were introduced into the model. Both concentrated disadvantage and homicide rates were significant predictors of police use of force, whereas race at the individual level was not. Lastly, considering the intersectionality between race/ethnicity and social class, research must be cautious about the true effect of race/ethnicity, which may be confounded by social class (Friedrich, 1980; Lersch et al., 2008; Worden & Catlin, 2002).

Contrary to research findings that indicate race/ethnicity affects police use of force, other studies report that a suspect's race/ethnicity is not a significant predictor of police use of force (Engel et al., 2000; Lawton, 2007; McCluskey et al., 2005; McCluskey & Terrill, 2005; Morabito & Doerner, 1997; Mulvey & White, 2014; Phillips & Smith, 2000; Sun & Payne, 2004). Not only was race/ethnicity insignificant in these studies, but some of these findings were consistent across multiple models (Phillips & Smith, 2000; Sun & Payne, 2004). Through the examination of behavioral sequences between suspects and officers, Terrill (2005), for instance, found that race/ethnicity did not influence an officer's likelihood to increase or decrease the level of force used against a suspect.

Sex. Research has also documented that male suspects are more likely to have force used against them than females during police-citizen encounters (Garner et al., 2002; McCluskey et al., 2005; McCluskey & Terrill, 2005; Phillips & Smith, 2000; Sun & Payne, 2004; Terrill & Mastrofski, 2002; Terrill & Reisig, 2003; Terrill, Paoline, & Manning, 2003). Terrill and Mastrofski (2002), for example, found that police were more likely to use various forms of force against men than women, such as physical restraint (19 percent versus 13 percent), verbal force (44 percent versus 40 percent), and impact force (.5 percent versus .3 percent). Other studies, however, suggest the effect of sex on police use of force is still uncertain (Crawford & Burns, 1998; Paoline & Terrill, 2004, 2007; Schuck, 2004; Terrill, 2005). In a study by Kaminski and colleagues (2004), they found no difference between male and female suspects when police officers employed a firm grip. In cases that involved a higher level of force, however, males were more likely to be the recipient of force compared to their female counterparts. It should be noted that

a few studies documented no significant association between sex and police use of force (Engel et al., 2000; Lawton, 2007; Morabito & Doerner, 1997; Mulvey & White, 2014).

Age. Along with race/ethnicity and sex, scholars have also analyzed the nexus (or lack thereof) between age and the use of force. The available research that exists on age generally examines the likelihood that force is used against older suspects. Although the empirical evidence suggests that police are less likely to use force against older suspects compared to their younger counterparts (McCluskey & Terrill, 2005; McCluskey et al., 2005; Paoline & Terrill, 2007; Phillips & Smith, 2000; Terrill & Mastrofski, 2002; Terrill & Reisig, 2003; Terrill et al., 2003), the findings are not entirely consistent. Paoline and Terrill's (2004) research indicates that verbal and physical force against older suspects was contingent upon the officer's sex. They found that male officers were less likely to use verbal and physical force against older suspects. In comparison, female officers were only less likely to use physical force against older suspects. At the other end of the age spectrum, Crawford and Burns (1998) found that officers were more likely to use less-than-lethal force against younger citizens (see also Terrill, 2005). In the same study, they also noted that age did not affect the likelihood that officers employed verbal commands, chemical spray, or a firearm. As with the research on race/ethnicity and sex, there are also studies that document non-significant findings between age and use of force (Engel et al., 2000; Garner et al., 2002; Kaminski et al., 2004; Terrill et al., 2008).

Mental Health and Substance Abuse. The effects of impairment (i.e., intoxicated, under the influence of drugs, or mentally ill) on the likelihood that police use force is an area of study best characterized by contradictory findings. Although some research has found that police use of force is more likely to be used against impaired

suspects, they did not delineate the type of impairment, meaning an individual could have been under the influence of drugs, intoxicated, mentally ill, or some combination of those attributes (Crawford and Burns, 1998; Engel et al., 2000; Garner & Maxwell, 2000; Garner et al., 2002; Terrill & Mastrofski, 2002). For those studies that specified the type of impairment, the general finding was that citizens under the influence of alcohol were more likely to have force used against them, whereas drug impairment was not associated with increased levels of force (Bayley & Garofalo, 1989; Garner et al., 1996; Friedrich, 1980). It should be noted, however, that Kaminski and colleagues (2004) found the exact opposite.

Inferences about the relationship between mental illness and police use of force are limited in scope due to the paucity of research. The limited research examining mental illness and police use of force generally indicates that mental illness is not a significant predictor of police use of force (Johnson, 2011; Terrill & Matrofski, 2002). Conversely, Kaminski and colleagues (2004) found that a combined measure of impairment that included drugs, alcohol, and mental illness was related to police use of force. The driving force behind this finding, however, was almost entirely explained by drug impairment. In one of the most recent studies examining the nexus between mental illness and police use of force, Mulvey and White (2014) found that police officers were more likely to use higher forms of force (i.e., baton, OC spray, TASER, firearm, or other weapon) against mentally ill persons compared to suspects who were not mentally ill.

Officer Characteristics

Race/ethnicity. Research examining police use of force has also focused attention on police officer characteristics. Whereas early research was relatively devoid of such

analyses (Riksheim & Chermak, 1993; Sherman, 1980), recent research has renewed this avenue of study. One of the attributes that has received empirical testing is the police officers' race/ethnicity. Research has generally found that an officer's race/ethnicity is not significantly associated with the likelihood that police use force (Friedrich, 1980; Geller & Karales, 1981; Lawton, 2007; McElvain & Kposowa, 2004; McCluskey et al., 2005; McCluskey & Terrill, 2005; Morabito & Doerner, 1997; Paoline & Terrill, 2004, 2007; Terrill & Mastrofski, 2002). In fact, Crawford and Burns (1998) found that this null result extended to most types of force, including verbal command, physical restraint, chemical spray, non-lethal weapon, and firearm. Nevertheless, a few studies have found an association between officer race/ethnicity and use of force. Sun and Payne's (2004) models revealed that black officers were more likely than white officers to resolve interpersonal citizen conflict through coercion (see also Fyfe, 1982); however, this effect disappeared after controlling for neighborhood characteristics and various interaction terms. As Fyfe (1988) suggests, differences in NYPD shooting rates may be largely attributable to where an officer lives and is assigned to patrol, noting that Black officers were more likely than White officers to frequent New York City's high-crime areas. Branching outside of Black-White dichotomy, Garner and colleagues (2002) included Hispanic officers in their study. The results suggested that although race/ethnicity did not affect the severity of force being used, Hispanic officers were more likely than White officers to use force.

Sex. Akin to race/ethnicity, studies investigating the effect of an officer's sex on use of force have revealed negligible results. After controlling for number and type of complaint against the police officer, McClusky and Terrill (2005) found no relationship

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between an officer's sex and use of force, which has been documented elsewhere in the literature (Crawford & Burns, 1998; Kaminski et al., 2004; Lawton, 2007; McCluskey et al., 2005; Paoline & Terrill, 2007; Phillips & Smith, 2000; Sun & Payne, 2004; Terrill & Mastrofski, 2002; Terrill et al., 2008). Albeit the null results that suggest the prevalence and type of force are generally unrelated to an officer's gender, a few studies have produced anomalous findings. Garner and associates (2002) found that female officers were less likely to use force, including severe forms of force, compared to male officers. Furthermore, Kop and Euwema (2001) found that male officers were more likely than female officers to resort to force against a suspect, even though there was no difference between male and female officers in their attitudes toward use of force (see also Morabito & Doerner, 1997). Lastly, in one of the more methodologically and statistically rigorous studies examining gender, Paoline and Terrill (2004) found that male officers were more likely than their female counterparts to use greater forms of force against male suspects. In general, though, their research suggested that "the predictors of coercion are relatively indistinguishable across males and females" (Paoline & Terrill, 2004, p. 114)

Experience and age. Research examining the relationship between an officer's level of experience and use of force has produced mixed results. Several studies document a negative association between the two variables, meaning officers are less likely to use force if they have more experience (Paoline & Terrill, 2007; Terrill & Mastrofski, 2002). In fact, Kop and Euwema (2001) found that when compared to officers with less experience, seasoned officers held less favorable attitudes toward the use of force, meaning they perceived force as a last resort that should not be relied upon in their daily activities. Moreover, McElvain and Kposowa's (2004) research indicates

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that experienced officers were less likely to be investigated by internal affairs for incidents involving use of force. Conversely, several other studies found that experience was not a significant predictor of police use of force (Lawton, 2007; McCluskey et al., 2005; McCluskey & Terrill, 2005; Sun & Payne, 2004; Terrill et al., 2008). It should be noted that the mixed findings may be the product of how police use of force was operationalized. Crawford and Burns (1997), for instance, suggest that while experienced police officers were less likely than inexperienced colleagues to use a firearm or restraining hold, such differences did not exist for verbal commands, chemical spray, and nonlethal weapons (see also Kaminski et al., 2004; Morabito & Doerner, 1997; Paoline & Terrill, 2004).

Relative to experience, research examining the effect of an officer's age on use of force is infrequent in the literature. This is somewhat surprising given that "violence…is a young man's game. Thus we should expect that young, male police officers should use force more than their…older officers" (Adams, 1999, p. 503). While speculative, the absence of such research may be due to the strong correlation between age and experience. The limited research and mixed results that exist on the topic makes it difficult to draw any type of generalizations. Whereas Crawford and Burn's (1998) study found null results, Garner and colleagues' (2002) research suggested that not only were older officers less likely to use force, but when they did, the form of force was less severe compared to their younger counterparts. Similarly, McElvain and Kposowa (2004) found that younger officers were more likely than their older counterparts to be investigated by internal affairs for use of force incidents.

Education. The importance of education for police officers can be traced back to August Vollmer and the Professional Movement in the early 20th century. At the end of World War 1, Vollmer introduced a general intelligence test to the Berkeley Police Department in order "to eliminate intellectually inferior candidates" (Wilson, 1953, p. 99). In addition to general testing, Vollmer also promoted the idea that police departments need training facilities in order to ensure officers attain professional standing. In conjunction with faculty members at the University of California, Berkeley, Vollmer developed a policing school in the Berkeley Police Department. The notion to educate police officers was later expanded upon by the President's Commission on Law Enforcement and Administration of Justice (1967), who encouraged police departments around the country to hire college-educated personnel. The basis for this recommendation was that higher levels of education were thought to provide police officers with a better foundation in which to make decisions (Worden, 1990).

Paoline and Terrill (2007) found support for the Commission's recommendation, as their analysis suggests that police officers with higher levels of educational attainment were less likely to use force than officers with less education (see also Rydberg & Terrill, 2010; Terrill & Mastrofski, 2002). In fact, McElvain and Kposowa (2008) found that officers with a college degree were 41 percent less likely than officers with a high school diploma or "some college" to fire their gun. Worden (1997) found that police officers with higher levels of educational attainment were more likely to use reasonable force during suspect encounters (see also Milton, Halleck, Lardner, & Abrecht, 1977; Kane & White, 2009). Still, other studies report that education does not make a difference in the likelihood of deploying force (Hayden, 1981; Sherman & Blumberg, 1981). Finally,

some research has found that education has an effect on police use of force but it depends on the type of force being employed during the police-citizen encounter or departmental policy changes (Morabito & Doerner, 1997; Paoline & Terrill, 2004).

Situational/Encounter-Level Characteristics

      Weapons. In explaining variations among police use of force, research has examined the influence of encounter-level factors, which are not directly related to the suspect but specific to the police-citizen situation. One of the most prominent encounter-level factors examined by researchers is whether the suspect possessed a weapon. Due to the inherent danger posed to the officer and/or public, it seems intuitive that the officer would be more likely to use force in order to subdue the suspect and maintain control of the situation. Early research on police use of deadly force has found that officers are more likely to shoot or shoot at suspects who pose an imminent threat (Binder & Fridell, 1984; Binder & Scharf; 1982; Fyfe 1980, 1982, 2010). In situations involving an armed suspect, Kobler (1975) found that police officers employed deadly force approximately 75 percent of the time to protect themselves or prevent the suspect from fleeing (see also Fyfe 1977, Horvath, 1987). In fact, the effect of an armed suspect (especially if it involved a gun) on a police officer's decision to use deadly force is so robust that internal and external working factors (e.g., administrative policy, police subculture norms, directives from the chief, etc.) have little influence on a police officer decision making in situations posing an immediate danger (see White, 2000, 2001, 2002). Furthermore, research examining less-than-lethal forms of police force has also found that police officers are more likely to use force in situations involving a weapon (McCluskey et al., 2005; Paoline & Terrill, 2007; Sun & Payne, 2004; Terrill & Mastrofski, 2002); however, nuances exist in the

empirical evidence (Crawford & Burns, 1998; Kaminski et al., 2004; Morabito &

Doerner, 1997; Terrill et al., 2003). Paoline and Terrill's (2004) research, for example,

suggests that while male officers were more likely to use physical force in circumstances

involving a weapon, female officers were neither more nor less likely to rely on force

(verbal or physical) in the same scenario. To date, only a single study has found that

possession of a weapon was not significantly related to police use of force (McCluskey &

Terrill, 2005).

Demeanor. Since the 1960s, research has been concerned with the factors that

affect various outcomes during the police-citizen encounter. For example, early research

found that a suspect's demeanor, specifically increased levels of suspect hostility,

increased the likelihood that the police-citizen encounter ends in an arrest (Black, 1970,

1980; Black & Reiss, 1970; Lundman, 1974; Lundman et al., 1978; Piliavin and Briar,

1964; Smith, 1984, 1987). In an attempt to provide an explanation for such findings, Van

Maanen (1978) argued that police officers often categorize citizens into three groups:

"assholes," "know nothings," and "suspicious persons." Whereas "suspicious persons"

are recognized on the basis of their appearance and "know nothings" are just your

average citizens, the "asshole" is disrespectful, confrontational, and poses an affront to

the police officer's authority. In other words, "assholes" are the individuals that display

"flagrant disregard for the sentiments of the police" (Van Maanen, 1978, p. 316). As a

result of the "asshole's" demeanor, police officers remedy the situation by delegating

"street justice" in the form of force and/or arrest.

Research continues to highlight the role that suspect demeanor plays in police-

citizen encounters and the use of force. Even though the research is mixed, there are a

few noteworthy studies. Engel and colleagues (2000), for instance, found that disrespectful citizens were more likely to be the recipients of police force than those who were respectful (across nine different models). When interaction terms were created between demeanor and other variables, however, the effect was not significant: "It appears that police officers expect their authority to be observed equally by all suspects, and do not make distinctions based on race, sex, location, and the seriousness of the situation" (Engel et al., 2000, p. 256). Similarly, Sun and Payne's (2004) findings suggest that police were more likely to resolve a quarrel through coercive means in cases involving disrespectful citizens (see also Garner et al., 2002; Kaminski et al., 2004).

In contrast to the aforementioned findings, other research indicates that demeanor is either inconsistent or inconsequential. Whereas Crawford and Burns (1998) found that suspect demeanor did not affect the use of a verbal command or firearm, aggressive demeanor did impact the likelihood that police officers used chemical spray and nonlethal weapons against the suspect. Moreover, a host of studies failed to find a significant relationship between suspect demeanor and police use of force (McCluskey et al., 2005; McCluskey & Terrill, 2005; Paoline & Terrill, 2004, 2007; Phillips & Smith, 2000; Terrill et al., 2003). Critics often attribute these disparities to the inconsistent nature in which demeanor is operationalized and measured in research (Engel, Klahm, & Tillyer, 2010). As Klinger (1994, 1996) indicated, research prior to 1981 would often consider many illegal acts to be a form of demeanor. The issue with operationalizing demeanor in this manner is that it is defined as legally permissive behavior by citizens. After delineating between the two concepts, operationalizing them correctly, and including

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criminal conduct as a control variable, Klinger (1994, 1996) found that demeanor (i.e., legally permissible behavior) did not increase the likelihood of arrest.

Resistance. Research in the past 10 to 15 years has highlighted the dynamic nature of police-citizen encounters. A reoccurring theme in the literature is that citizen resistance during an encounter with the police increases the likelihood that force is employed (Adams, 1999). Intuitively, this seems logical given that the police are mandated to protect themselves and others from harm. Furthermore, considering that police officers are instructed to use force along a continuum of encounter-level provocations, it would be expected that resistance would increase the probability that the police will use force. In fact, the empirical evidence suggests that police are more likely to use force in instances where the suspect is resisting compared to those who comply with the officer's requests (McCluskey & Terrill, 2005; McCluskey et al., 2005; Mulvey & White, 2014; Paoline & Terrill, 2004, 2007; Schuck, 2004; Terrill et al., 2003; Terrill et al., 2008). Alpert and Dunham (1999), for instance, found that police officers used force in 97 percent of the cases involving some type of suspect resistance. Similarly, after controlling for more than 50 suspect, officer, and encounter-level characteristics, Garner and colleagues (1996) found that resistance was still the most influential predictor of police use of force (see also Terrill & Mastrofski, 2002). Moreover, as Terrill and Mastrofski (2002) report, such resistance may include passive, verbal, defensive, and/or active resistance. As Terrill and Mastrofski (2002) found, police officers use more severe forms of force against suspects that display greater resistance. Although the general pattern suggests resistance is a significant predictor of police use of force, Lawton (2007) did not find a significant association. Importantly, Lawton (2007) was able to control for

contextual-level variables, which included racial heterogeneity and district violent crime rates.

Arrest. Whereas early assessments of police use of force rarely considered the impact of arrest (Riksheim & Chermak, 1993; Sherman, 1980), more contemporary studies have begun to examine this factor in relation to police use of force. The general trend among research indicates that police officers are more likely to employ force in situations involving an arrest (McCluskey & Terrill, 2005; McCluskey et al., 2005; Paoline & Terrill, 2007; Terrill & Mastrofski, 2002; Terrill et al., 2003). In a national review of police use of force, Hickman and colleagues (2008) found that police officers employ less-than-lethal forms of force approximately 20 percent of the time in incidents involving an arrest. Even though police use of force is more common in scenarios involving an arrest, there are slight differences among male and female officers. Paoline and Terrill (2004), for instance, found that while both male and female officers were more likely to use physical force during an arrest, female officers' reliance on verbal force was not influenced by an arrest compared to male officers. Research examining the effect of arrest on police use of force must be viewed with skepticism, however, because most studies are unable to establish temporal precedence, meaning it is difficult to determine if force was used prior to the initiation of the arrest. Such a concern is further compounded by the fact that some police departments require that a suspect is handcuffed during the arrest as a safety precaution, which requires police officers to use that level of force. For this reason, some researchers suggest that the use of handcuffs should not be included in measures of police use of force because it may overestimate the occurrence that police employ force. Terrill and Mastrofski (2002) suggest this limitation is best

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rectified by including an arrest variable "to control for the level of physical force required by a departmental procedure to accomplish the arrest" (p. 231).

The presence of other officers/bystanders. Prior to 1993, research examining the nexus between the presences of additional police officers and police use of force is relatively nonexistent (Rikscheim & Chermak, 1993). More recent research has explored this situational dynamic. The effect of additional officers varies from increasing the likelihood (Garner et al., 2002; Paoline & Terrill, 2007; and Terrill & Mastrofski, 2002) to decreasing the likelihood (Lawton, 2007) of police use of force, although a few studies report null findings (Engel et al., 2000; McCluskey, et al., 2005). Other studies have found that the impact of additional officers varies by the location of the encounter (Terrill et al., 2003) and the number of police officers present during the encounter. Phillips and Smith (2000), for instance, discovered a negative association between additional officers and police use of force, but only when there were more than three officers present during the police-citizen encounter (see also Terrill, 2005). Moreover, White and Klinger (2012) found that the "contagious fire" effect (i.e., where officer initiated gunfire triggers a cascade of gunfire from fellow officers) was unrelated to the average number of shots fired by each officer, meaning the presence of additional officers neither increased nor decreased the likelihood that police use deadly force.

Along with the presence of additional officers, research has also documented that the company of other bystanders (i.e., citizens) during the police-citizen encounter can influence an officer's decision to employ force. Despite the dearth of research prior to 1993 (Riksheim & Chermak, 1993), current studies have given attention to the impact of additional bystanders, with several studies indicating that they do not have an effect on

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police use of force (McCluskey et al., 2005; Paoline & Terrill, 2004, 2007; Schuck, 2004; Terrill, 2005; Terrill & Mastrofski, 2002; Terrill et al., 2003; Terrill et al., 2008). Alternatively, some research has found that police were more likely to use force as the number of bystanders increased during a police-citizen encounter (Engel et al., 2000), while others noted that the association between additional bystanders and police use of force depended on the type of force being used to control the suspect (Crawford & Burns, 1998; Garner et al., 2002; Phillip & Smith, 2000).

Organizational/Department-Level Characteristics

Although police officers are granted a tremendous amount of freedom to carry out their occupational mandate, research suggests that police use of force is influenced by formal and informal organizational characteristics. Precipitated by the President's Commission on Law Enforcement and the Administration of Justice's (1967) concern over the lack of administrative protocols guiding deadly force, policies were implemented to provide directives as to when and where deadly force was appropriate (i.e., restrictive policies). The implementation of such policies enabled social scientists to evaluate their effectiveness. Using data from the New York City Police Department, Fyfe (1979) found that the implementation of restrictive policies was followed by a significant decrease in deadly force incidents, officer injury, and officer deaths. Analogous effects following the implementation of restrictive policies have also been documented in Oakland, Omaha, Kansas City, Los Angeles, Dallas, Philadelphia, and Memphis (Fyfe, 1988; Geller & Scott, 1992).[2] In a similar vein, research has also demonstrated that the abolishment of

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[2] Administrative policies have also been effective at controlling other types of critical incidents, such as high-speed pursuits and use of K-9s (Walker, 1993).

restrictive policies led to an increase in the number of police shootings (White, 2001).

Such findings led Walker (1993) to conclude that "administrative rules have successfully

limited police shooting discretion, with positive results in terms of social policy. Fewer

people are being shot and killed, racial disparities in shootings have been reduced, and

police officers are in no greater danger because of these restrictions" (p. 32).

Police use of force is not only influenced by formal policies, but also by the

informal organizational culture in which police are embedded (Skolnick & Fyfe, 1993).

Although conceptual differences exist in how police culture is defined (see Reuss-Ianni,

1983; Sparrow et al., 1990; Herbert, 1998), common cultural themes emerge as a function

of police officers' working environment. As Brown (1981) states,

> What must be recognized is that patrolmen lead something of a schizophrenic
> existence: they must cope not only with the terror of an often hostile and
> unpredictable citizenry, but also with a hostile—even tyrannical—and
> unpredictable bureaucracy. (p. 9)

Due to the strain accompanying these circumstances, police officers often develop

an "us vs. them" attitude (i.e., subculture) toward citizens that is oriented around

"covering your ass" (Van Maanen, 1974) and "showing balls" (Reuss-Ianni, 1983).

Nevertheless, variation does exist in the extent to which police officers conform to the

stereotypical (i.e., traditional) police culture. As Muir (1977) highlighted in his

qualitative typology study, the degree to which police officers believed using high levels

of coercion was acceptable was associated with the concomitance to their role as

"enforcers" or crime-fighters. Supporting Muir's (1977) observation, Terrill et al. (2003)

found that police coercion is the result of differences in cultural based attitudes.

Specifically, officers that embraced the traditional police culture (i.e., the crime-fighter

mentality) were more likely to use coercion than those with nontraditional cultural attitudes.

The informal organizational culture that arises within a police department is also impacted by those holding positions of power. As Skolnick and Fyfe (1993) highlight, the actions of a police department reflect the philosophy or tone set by the police chief. In Los Angeles, for instance, aggressive policing became the dominate enforcement style under William Parker, which was perpetuated by Chief Gates when he took over the LAPD. Under both police chiefs, police officers were expected to participate in combative, proactive police work (i.e., "The LAPD Mentality"). As a result, the department condoned brutality and the unwritten rule became "Teach them a lesson" (Skolnick & Fyfe, 1993, p. 13). When the LAPD's philosophy was finally exposed with the King beating, individual blame was placed on a few people directly involved in the incident, but as Skolnick and Fyfe (1993) indicate, "there may be some rotten apples, but usually the barrel itself is rotten" (p. 13). In other words, most of the police officers embodied a subculture embracing the LAPD mentality created by their police chief. The LAPD is not an isolated incident as similar cases have existed under Chief Brier in Milwaukee and Chief Rizzo in Philadelphia.

Ecological Characteristics

Despite the evidence suggesting that context matters, research examining the effect of ecological factors on police behavior is relatively underdeveloped. Highlighting this point, Klinger (1997, 2004) noted that most research examining police behavior focuses on situational characteristics while neglecting the environment. As Klinger (1997) states, "A few studies have considered the possibility that police action might vary

across urban neighborhoods…but none contains any systematic theory linking police activity to the ecological context in which it occurs" (p. 278). Based on Herbert (1997) and Rubinstein's (1973) work, Klinger (1997, 2004) contends that research must investigate the geographic space in which policing is organized (e.g., "police districts" and "police beats") because it provides the cognitive schemas through which police officers understand crime and the citizens contained therein. Understanding these ecological contexts, therefore, is paramount because it advances the theoretical breadth on policing behavior and offers a "systematic theory on how and why police behavior varies across space" (Klinger, 2004, p. 278)

Variation in police behaviors across localities are expected to be influenced by community and neighborhood characteristics (Herbert, 1997; Klinger, 1997; Rubinstein, 1973). Klinger (1997) highlighted this point by suggesting that the perceived levels of deviance in a particular area may provide police with a way to gauge the appropriate action to take, or the "going rate" of violence in a given area. Even after controlling for situational and temporal variables, police behavior is still affected by characteristics of the place in which the crime occurred. As Herbert (1997) states,

> The location of the incident is also recognized as crucial, because it may shape how officers view situations; officers may understand an area to be characterized by a certain way of life that must be taken into consideration…. [P]olice officers are acutely aware of the prevailing moral order in the areas they patrol and act in accordance more with that than with the law. (pp. 35-36)

Herbert's (1997) observation closely resembles Werthman and Piliavin's (1967) contention of "ecological contamination," which proposes that individuals located in "bad" neighborhoods assume moral liability. In other words, individuals located in areas

with high crime rates are viewed by police as being more suspicious, dangerous, and guilty on the basis of their locale, regardless of personal characteristics or behavioral manifestations.

Research supporting the ecological contamination hypothesis has found that higher rates of police use of force exist in disadvantaged neighborhoods (Terrill, 2003; Terrill & Reisig, 2003). Terrill and Reisig (2003) found that suspect's race/ethnicity significantly influenced the level of force used by the police. When concentrated disadvantage and homicide rates were introduced into their models, however, the suspect's race/ethnicity fell below statistical significance while the aforementioned macro-level factors maintained their robustness. Thus,

> [P]olice are significantly more likely to use higher levels of force when encountering criminal suspects in high-crime areas and neighborhoods with high levels of concentrated disadvantage independent of suspect behavior, officer characteristics, and other statistical controls. (p. 306)

These results suggest that ethnic minority suspects are more likely to have higher levels of force used against them because police encounter them disproportionately in high-crime and disadvantaged neighborhoods (see also Barlow & Barlow, 2000; Mastrofski et al., 2002; Terrill, 2001, 2003).

Further delineating the association between ecological factors and police behavior, studies have recognized the impact of an area's socioeconomic makeup and level of crime. Through observational research and interviews with Oakland and San Francisco, California, patrol officers, Werthman and Piliavin (1967) identified that officers not only rely on suspect-level characteristics to define suspiciousness, but also the neighborhood context:

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past experience leads them to conclude that more crimes are committed in the poorer sections of town than in the wealthier areas, that Negroes are more likely to cause public disturbances than Whites, and that adolescents in certain areas are a greater source of trouble than other categories of the citizenry" (p. 75).

Smith (1986) conducted one of the most rigorous studies on neighborhood context and police behavior using data from the Police Services Study. Based on the findings from this study, Smith concluded that while officers were more likely to use force on blacks, the effect was mediated after controlling for the neighborhood context, suggesting that racial composition, socioeconomic factors, and crime rate were more robust predictors than the suspect's race (see also Terrill & Reisig, 2003). Similarly, Kane (2002) also found that increases in the Latino population across precincts significantly influenced police misconduct over time. Such findings are consistent with the wealth of research that indicates police use of force is more likely to occur in predominantly racial and ethnic minority neighborhoods (Barlow & Barlow, 2000; Georges-Abeyie, 1991; Jacobs & O'Brien, 1998; Smith, 1986; Worden, 1995).

Ecological Variation and the Minority Threat Perspective

Since the early 1990s, research began to focus attention on how levels of formal social control vary across places (Liska, 1992). Although several theories have been proposed to account for such variation, the role of social threat continues to be a focal point among contemporary accounts. This framework suggest that the quantity and quality of crime control efforts and infrastructures reflect an oppressive system that protects the power and privilege of dominant groups of society by delegating greater formal social control to areas considered a "problem population" (Chambliss & Seidman, 1971; Jackson, 1989; Liska, 1992; Quinney, 1980; Spitzer, 1975; Turk, 1966;). Whereas

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traditional theories emphasized the role of economic inequality as a source of threat, more recent research has begun examining the influence of race/ethnicity within the context of ecological variation.

Premised on the broader group threat and race relations sociological literature (Blalock, 1967; Blauner, 1972; Blumer, 1958), modern-day studies hypothesize that the level of social threat fluctuates with the racial and ethnic composition of certain places (Eitle, D'Alessio, & Stolzenberg, 2002; Holmes, 2000; Jackson, 1989; Liska, 1992; Jacobs & O'Brien, 1998; Kent & Jacobs, 2005). Making the transition from dangerous class to minority class, Blumer (1958) argued that the relative size and geographic concentration of ethnic minorities in a particular area will shape the political and economic threat perceptions among majority (i.e., White) group members, which subsequently results in a greater degree of formal social control to maintain the status quo of the dominant class. As a result of this formal social control, intergroup conflict arises because the minority group seeks to overcome social, economic, and political marginalization.

Elaborating on the minority threat process, Blalock (1967) suggests that the majority group's level of perceived threat will reciprocate the growing size of the minority population, which threatens the economic and political interests and status quo of the majority group. In order to mitigate the concern that the minority group may establish itself politically and economically, Blalock (1967) argues that the majority (i.e., White) group will increase formal social control to maintain their dominance. Although Blalock (1967) speculates that the relationship between both forms of threat and social control will be curvilinear, the types of nonlinearity are different. Specifically, as the

level of economic threat increases, there will be an initial counter effect in the form of formal social control; however, this effect will eventually level off or *decelerate* at a certain point. Conversely, as ethnic minorities gain recognition politically, there will be a modest association between threat and social control at lower levels and then a disproportionately greater or *accelerated* effect at increased levels of threat. Thus, under minority threat perspective, it would be expected that the police would exert more coercive authority, or force, in areas where ethnic minorities are concentrated as a way to control the "dangerous class" and promote the dominant class (Blalock, 1967; Jackson; 1989).

Past and present research examining various aspects of the minority threat perspective suggests that the criminal justice system may be one mechanism through which the majority group maintains control of culturally dissimilar minority groups. Although research supporting the minority threat perspective is mixed, numerous studies have documented a relationship between minority representation and various policing outcomes (Brandl, Chamlin, & Frank, 1995; Chamlin, 1990; Greenberg et al., 1985; Kane, 2003; Liska et al., 1981; Nalla, Lynch, & Leiber, 1997). Supporting the minority threat framework, Jackson and Carroll (1981) found that a city's racial composition, frequency of riots in the 1960s, and level of black mobilization activity were significant predictors of police expenditures (see also Jackson, 1986). Similarly, Jackson (1985) found that the relationship between percent Hispanic and policing expenditures was curvilinear, with policing expenditures increasing until a city's Hispanic composition, or percentage, reached approximately 40 percent. In some of the more recent research, however, there has only been moderate to minimal support for the minority threat

hypothesis (Holmes, Smith, Freng, & Munoz, 2008; Stults & Baumer, 2007).

The minority threat perspective has also been operationalized in terms of the nexus between racial/ethnic composition and the outcome of arrest. Using 175 large cities across the United States in 2001, Parker, Stults, and Rice (2005) found that black structural disadvantage was positively associated with police arrests. Furthermore, Eitle and Monahan's (2009) research found that racial inequalities significantly predicted drug arrest rates for both white and black suspects, meaning that macro-level factors may have a stronger impact on police decision making than the people residing in these localities. Advancing research on the minority threat framework, Kane, Gustafson, and Bruell (2013) better conceptualized the threat triggers (e.g., racial/ethnic composition was measured as percent change between 1990 and 2000; change in racial/ethnic composition was relative to the historical white population representation) and used misdemeanor arrest as their outcome—a measure that captures police discretion. Whereas increases in Black representation tended to increase Black misdemeanor arrests in historically White areas, "surges in the Latino population were associated with increased minority misdemeanor arrests across all tracks generally" (Kane et al., 2013, p. 976).

SQF, Police Use of Force, and the Minority Threat Perspective

Although the application of the minority threat hypothesis is relatively limited in policing scholarship, it has the capacity to explain race/ethnicity differentials in police use of force during SQFs.[3] Specifically, police officers may use race/ethnicity as a way to describe, identify, and control a typical offender or offender population in order to

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[3] It should be noted that the NYPD refers to Terry stops as stop, question, and frisk encounters, or SQF.

preserve the status quo for the political elite (Harris, 2002). Although police officers are thought to be apolitical, their occupational mandate is politically defined and they function in a public political arena. As Manning (1978) states, the factors that influence the administration of law "all reflect the political organization of society. The distribution of power and authority, for example, rather than the striving for justice, or equal treatment under the law, can all have a direct bearing on enforcement" (Manning, 1978, p. 106). Considering that law enforcement practices have historically been "conditioned by broader social forces and attitudes—including a long history of racism" (Williams & Murphy, 1990, p. 28), there may be reason to believe that police force during SQFs is used disproportionately against ethnic minority communities. In line with the minority threat perspective, the police may be a political mechanism through which the majority group in society (i.e., Whites) maintains their power and privilege by subjecting the minority group (i.e., ethnic minorities) to greater formal social control (i.e., police use of force).

The Legal Precedent on SQF

The legal precedent dictating an investigative stop and police conduct during a SQF stems from *Terry v. Ohio* (1968). In this case, Officer McFadden's attention was attracted to two men standing on the street corner. The two individuals, Chilton and Terry, were walking back and forth in front of a store while simultaneously staring through the store window. Occasionally, the two individuals would stop, confer with each other briefly, and then continue walking back and forth in front of the store while staring through the window. After 10 to 12 minutes of this behavior, Chilton and Terry eventually left the store's location at which point Officer McFadden followed them

(*Terry v. Ohio*, 1968). Shortly after following the two individuals, McFadden noticed them stop in front of another store but this time they were accompanied by a third man. Fearing these individuals had a gun, Officer McFadden stopped the three men, asked them their names, and conducted a pat-down search of Terry and Chilton outside of their clothing. During the pat down, Officer McFadden found pistols on both men. Although Terry and Chilton would later appeal their convictions for carrying a concealed weapon on the grounds that the weapons were obtained through an unreasonable search and seizure, the U.S. Supreme Court confirmed their convictions as being constitutionally permissible (*Terry v. Ohio*, 1968).

Compared to other more invasive searches, a "stop" is less than a full seizure within the meaning of the Fourth Amendment. The justification for the initial stop is premised on reasonable suspicion—an evidentiary standard—that criminal activity may be occurring. Instead of applying the probable cause standard, which governs full arrests and searches, the "Court applied the fundamental test of the Fourth Amendment: the reasonableness under all the circumstances of the particular governmental invasion of a citizens personal security" (Ferdico et al., 2015, p. 309). Hence, police officers may stop a person if they reasonably suspect crime is afoot in light of the totality of the circumstances, which means the whole picture must be taken into account, and importantly, it is determined on a case-by-case basis. In other words, law enforcement must derive reasonable suspicion based upon objective observations and available information (*United States v. Cortez*, 1981). Furthermore, officers may also use their own experience and specialized training to deduce reasonable suspicion (*United States v. Arvizu*, 2002).

To determine whether a person has been seized (i.e., stopped because of reasonable suspicion) within the meaning of the Fourth Amendment, the Court established several criterions. First, in *United States v. Mendenhall* (1980), the Court determined that "[A] person has been 'seized'…only if, in view of all of the circumstances surrounding the incident, a reasonable person would have believed that he was not free to leave" (pp. 554-555). If, for instance, officers displayed their weapons or used certain language to make a reasonable person believe he or she is not free to leave, it is considered an illegal seizure under the Fourth Amendment unless there is reasonable suspicion. Importantly, the free-to-leave test devised in *Mendenhall* (1980) is objective: it is "not whether the citizen perceived that he was being ordered to restrict his movement, but whether the officer's words and actions would have conveyed that to a reasonable person" (*California v. Hodari D.,* 1999, p. 628).

The second criterion for determining a seizure is the "free to decline requests or terminate encounter" test (Ferdico et al., 2015). If the stop is not grounded in reasonable suspicion, the citizen may decline requests or terminate the encounter. Because of the investigative nature of police work, police officers may ask for identification or to search luggage as long as they "do not convey the message that compliance with their requests is required" (*Florida v. Bostick*, 1991, p. 435). Thus, if a citizen voluntarily stops and shows their identification in such circumstances, it is not considered a stop and search within the parameters of the Fourth Amendment so long as compliance is not implicitly or explicitly mandated by the officer.

After a person is stopped for reasonable suspicion, the Court recognized that

officers should be able to investigate whether a suspected person is armed. The Court

concluded that:

> [W]here a police officer observes unusual conduct which leads him to reasonably conclude in light of his experience that criminal activity may be afoot and that the persons with whom he is dealing may be armed and presently dangerous, where in the course of investigating this behavior he identifies himself as a policeman and makes reasonable inquiries, and where nothing in the initial stages of the encounter serves to dispel his reasonable fear for his own or other's safety, he is entitled for the protection of himself and others in the area to conduct a carefully limited search of the outer clothing of such persons in an attempt to discover weapons which might be used to assault him. (*Terry v. Ohio*, 1968, p. 30).

In determining the reasonableness of a frisk (i.e., pat-down of the person's outer clothing)

during a SQF or *Terry* stop, the Court identified that it involves a balancing act of

competing interests. On one hand, a person has the right to be free from unreasonable

searches and seizures. On the other hand, the government has an interest in preventing

and detecting crime and protecting law enforcement from dangerous persons. Generally,

the determination of these two competing interests involves the "weighing of the gravity

of the public concerns served by the seizure, the degree to which the seizure advances the

public interest, and the severity of the interference with individual interest" (*Brown v.

Texas*, 1979, p. 51).

The scope of reasonable investigative methods during SQFs is the product of an

officer's interactions with the stopped person. The initiation of a stop based on reasonable

suspicion does not enable an officer to frisk everyone he or she stops. Instead, the officer

must have "reason to believe that he is dealing with an armed and dangerous individual"

(*Terry v. Ohio*, 1968, p. 24). Such inferences that an individual is armed and dangerous

must be justified through specific facts (e.g., outline in pants the shape of a pistol) and the

police officer's experience in the field. Although not exhaustive, a frisk may be executed for one or more of the following reasons: suspected crime involves a weapon, suspect is edgy about the stop, bulge in suspect's clothing, furtive behaviors/movements, and/or suspect exhibits belligerent behavior during stop (for full review see Ferdico et al., 2015).

As mentioned earlier in this section, the justification for the initial stop is premised on reasonable suspicion[4]—an evidentiary standard—that criminal activity may be occurring. The reasonable suspicion standard was later expanded upon to included location and the individual's behavior (*Adams v. Williams*, 1972; *Illinois v. Wardlow*, 2000), which enables police officers to justify a lower "suspicion" standard in certain neighborhood contexts (Ferguson & Bernache, 2008). The Court stated in *Wardlow* (2000) that although high crime areas are not enough to support the reasonable suspicion standard, "officers are not required to ignore the relevant characteristics of a location in determining whether the circumstances are sufficiently suspicious to warrant further investigation" (*Illinois v. Wardlow*, 2000, p. 124). Considering that social disadvantage and "high-crime areas" are perceptually and statistically associated with ethnic minorities (Alpert et al., 2005; Fagan, 2008; Ferguson & Bernache, 2008; Loury, 2002), police may have elevated levels of suspiciousness in minority neighborhoods (Fagan et al., 2010). To the extent that the police have elevated levels of suspicion in these neighborhoods, it may

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[4] Information the officer sees, hears, or otherwise experiences first-hand; information from known informants; information from anonymous informants that is partially corroborated; information from police flyers, bulletins, or radio dispatches; behavioral cues by the suspect (e.g., flight and furtive gestures); suspect's association with known criminals or a prior criminal record; admissions of guilt; evidentiary cues (e.g., bulge in the suspect's pocket); and/or suspect matches description in report of a violent crime (Ferdico et al, 2015).

exacerbate and reinforce racial/ethnic inequalities in the practice of law enforcement, or as the minority threat perspective highlights, the subjugation ethnic minorities.

Racial Profiling and SQF

The way in which police officers use force during SQFs may be an artifact of profiling individuals. Profiling generally refers to the creation and action taken on behalf of some set of characteristics. While there are a multitude of physical and social attributes that police may use to profile individuals, none received more attention in the field of policing than racial profiling, which is likely due to the historically oppressive nature of law enforcement (Williams & Murphy, 1990). Such tactics serve as a demonstrable effort to control ethnic minorities who are perceived as being a threat. Research on the topic has identified two forms of racial profiling as potential organizational practices.

The first type of profiling links specific races with various kinds of offenses (Smith et al., 2003). During the 1990s, for instance, the U.S. Department of Justice developed and disseminated profiling practices to police forces across the United States to intervene in interstate drug trafficking (Harris, 2002). These practices became part of the criteria for stopping motorists. Consequently, in 1998, there were more than 25,000 police officers who were trained to identify drug couriers, which encouraged police officers to either implicitly or explicitly target individuals on the basis of ethnicity or race (ACLU, 1999; Allen-Bell, 1997). The Department of Justice believed that racially-based profiling was more efficient than random stops as a means to control crime (Engel, Calnon, & Bernard, 2002). As opponents of such practices have pointed out, however, racial profiling has not led to more drug seizures than traffic stops and searches among White drivers (Antonelli, 1996; Kociewiewski, 2002; Lamberth, 1996). The second form

of racial profiling is known as *out-of-place profiling* (Fagan, Dumanovsky, & Galman, 1999). Under this type of profiling, ethnic minorities are at a greater risk of being stopped by the police as they travel through white, especially upper-class, neighborhoods because their race does not "fit" the racial composition of the neighborhood (Meehan & Ponder, 2002). Such increased investigation and stops may reflect police officers' viewpoint of ethnic minorities as symbols of danger in majority communities.

Research examining racial profiling demonstrates its existence through observational studies, official police records, and self-report surveys. In an early study that came in response to New Jersey litigation, Lambert (1998) examined whether highway patrols racially profiled African Americans. While observing cars on the New Jersey turnpike and controlling for motor vehicle violations, he found that African Americans were 4.85 times more likely to be stopped and 16.5 times more like to be arrested than non-blacks. Similar findings have also been documented in Ohio with African-Americans being three times as likely to receive a ticket in comparison to non-Blacks (Harris, 1999; see also Browning et al., 1994; Cole, 1999; Veneiro & Zoubeck, 1999). More recent research continues to suggest that police disproportionately stop and search ethnic minorities at a rate that does not align with their baseline population, especially if they are Hispanic and African-American motorists (Ayres, 2008; Gross & Barnes, 2002; Langan et al., 2001; Parker, 2001; Smith et al., 2003; Smith & Pettrocelli, 2001; Weitzer & Tuch, 2006; Zingraf et al., 2000). Although extant research tends to find racial differences that reinforce the notion of profiling, the magnitudes of such disparities vary across studies. In a study by Berejarano (2001), for instance, African-American motorists were 50 percent more likely to be stopped than any other race. Conversely, in a

study by Smith and colleagues (2003), they found that African-American drivers were 17 percent more likely than White drivers to be stopped by North Carolina Highway Patrol.

As Ridgeway and MacDonald (2010) point out, these differences in racial profiling may be due to external and internal benchmarks used in studies. Studies using U.S. Census data to form an external benchmark, for instance, may underestimate or overestimate the effect of racial profiling on motor vehicle violations because it does not accurately "isolate racial bias from differential exposure and differential offending" (Ridgeway & MacDonald, 2010, p. 182). Other external benchmarks based on violent arrestee data may also pose methodological issues. Police departments claiming they do not engage in racial profiling because violent crime percentages by race/ethnicity match their corresponding stop rates fail to recognize that most stops are not premised on violence but minor infractions and suspected drug transactions. In other words, "[t]he group of individuals stopped by the police in most large cities, therefore, far exceeds the group comprising the arrestee population" (Ridgeway & MacDonald, 2010, p. 185). Similarly, there may be shortcomings associated with internal benchmarks. Some police departments, for example, have early warning systems that are premised on peer-to-peer comparisons. Although useful for identifying potentially problematic officers, there may be drawbacks if the department as a whole is corrupt because officers will not snitch on their partners.

Because there are a number methodological limitations associated with using official data,[5] scholars have also examined racial profiling through self-reports surveys.

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[5] A few of these limitations include the lack of information on the driver's behavior; there is no way to compare those stopped against those who were not; verbal warnings are often not recorded in

Similar to studies based on official records, self-report survey research highlights racial discrepancies. Using data from the *Contacts between Police and the Public* component of the 1999 National Crime Victimization Survey, Lundman and Kaufman (2003) found that police officers were more likely to make traffic stops for Black males, even after controlling for sample selection bias and demographic variables (i.e., social class, city size, and age). Furthermore, African-Americans and Latinos were also less likely to report being stopped for legitimate reasons and more likely to indicate being improperly treated by the police compared to whites. In a more recent study, Warren and colleagues. (2010) built upon prior self-report research by modeling nonbias mechanisms that may produce racial disparities in stops, which included self-report driving behavior, previous law convictions, and a spatial control for variation in police stop intensity. Whereas the multivariate analyses found that race, age, and vehicle age were all significant predictors for local police, driving behaviors had a larger effect on patrol officers' stop decision. Overall, empirically sound and generalizable research from nationwide probability samples and official police records indicate that compared to other races, ethnic minorities are more likely to be stopped, ticketed, arrested, handcuffed, or searched by police on the highways.

Summary

Few studies have examined the potential for racial profiling to occur in SQFs, let alone police use of force during these encounters. Research that has investigated disproportionate minority contact (DMC) during SQFs generally suggests that both an

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official records; and official data may be biased if the officer's write-up is inaccurate or incomplete (Donohue, 2000; Smith et al., 2003; Verniero & Zoubuck, 1999).

individual's race and the racial breakdown of a neighborhood affect police officers'

decision to stop and frisk suspects (Bittner, 1970; Fagan & Davies, 2000; Fagan et al.,

2010; Gelman, Fagan, & Kiss, 2007; Harris, 1993; Jones-Brown, Gill, & Trone, 2010;

Reiss, 1971). When developing cognitive frameworks of suspicion, police officers may

be using the racial composition of the neighborhood to establish their reasonable

suspicion standard at the individual level. Quillian and Pager (2001), for instance, found

that the prevalence of young black men affected urban residents' perceptions of crime in

their neighborhood, even after controlling for neighborhood characteristics and crime

rates. Extrapolating on Quillian and Pager's (2001) research, police may have distorted

perceptions of ethnic minorities in neighborhoods where they are heavily concentrated,

leading to a disproportionate amount of SQFs. As Alpert et al. (2005) found, the

suspicious behavior of ethnic minorities is generally premised on nonbehavioral cues

(i.e., race and neighborhood), whereas the same suspicion necessary for a SQF of a white

citizen was based on behavioral cues (e.g., activity that may indicate a drug transaction).

In a study by Smith (1986), suspects were more likely to be arrested in poor

neighborhoods, regardless of their behavior and crime type. Such results suggest that the

structural features of a neighborhood may interact with the social psychological

mechanisms through which police determine patterns of behavior and produce

perceptions of disorder (Sampson & Raudenbush, 2004). Consequently, various forms of

urban inequality may be perpetuated through discriminative policing tactics and intensity

(Fagan & Davies, 2000).

Given the far-reaching consequences of police use of force, the prevalence of

racial profiling, and the theoretical predictions of the minority threat perspective, this

dissertation seeks to explore the potential for racial and ethnic disparities in police use of force during stop and frisk activities. More specifically, this dissertation seeks to answer three important questions related to the intersection of racial profiling, deprivations of liberty, and police use of force. First, which factors predict use of force in SQFs across suspect, situational, departmental, and ecological levels of analysis? Second, after controlling for the appropriate micro- and macro-level variables, do police officers use force more often in predominately minority neighborhoods? Lastly, does an individual's race/ethnicity interact with the racial/ethnic composition of a police precinct to produce disparities in police use of force? To date, nearly all attention on SQF activities (in NYC and elsewhere) has focused on race/ethnicity in relation to the initial stop. As a consequence, research has not sufficiently explored the substance of these stops, especially whether force is used, and whether there were racial and/or ethnic disparities in use of force during those *Terry* stops. By answering the research questions above, this dissertation seeks to fill that void.

CHAPTER 3

THE STUDY SITE

From the early 1990s until present day, New York City has experienced a major

recession in crime. Although various explanations have been put forth to account for this

trend, the New York City Police Department (NYPD) continues to be a focal point of

controversy. Central to this debate are the changes that Commissioner William Bratton

adopted under his tenure—most notably the adoption of order maintenance policing

(OMP), stop-question-frisk (SQF) tactics, and Compstat. These changes, however, did

not occur independently of events in the city and the department. In an effort to better

understand the NYPD's current state of affairs regarding SQF tactics, it is critical to

examine the landmark events that reshaped the NYPD's organization, philosophy,

structure, and operations. Such a foundation will not only provide a backdrop for the

current state of SQF, but it will also illuminate the collateral consequences of deploying

SQF tactics, particularly as they relate to police-minority community relations. Combined

with a discussion of *Daniels et al. v. the City of New York* (2003) and *Floyd et al. v. The

City of New York* (2008), this chapter will provide the framework for how New York City

provides fertile ground to explore the intersection of SQF and racial disparities in police

use of force through the lens of the minority threat perspective.[6]

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[6] *Terry* stops have been controversial and led to litigation in other cities as well, including
Philadelphia, Baltimore, Chicago, and Detroit. But NYC has received, by far, the most attention,
scholarly and otherwise.

Contextualizing SQF Tactics, 1994-Present

Akin to many cities across the United States in the 1980s, New York City faced a major spike in violence, crime, and disorder.[7] Not only was New York City dealing with the emergence of crack cocaine, but the number of homicides grew exponentially from 1,392 in 1985 to 2,262 in 1990. Simultaneously, the streets of New York City, along with the subway system, were being flooded with social and physical disorder. Drug dealers became a widespread problem on various street corners, blocks, and city parks, where they were selling marijuana, heroin, cocaine, and/or crack cocaine. Drug use and transactions were readily observable by individuals in the communities. The crack-cocaine endemic in New York City was of particular concern because selling crews relied on guns and violence to maintain their clientele and territory (Johnson, Golub, & McCabe, 2010, p. 18). In addition to the flourishing drug market, New York City was also rife with beggars and panhandlers. While some were passive and peaceful, others were aggressively approaching subway users for money. The beggar and panhandler problem became so pronounced that "[a]pproximately 1,200 to 2,000 persons a night were sleeping in the subway…. Following on the heels of disorder and petty crimes, robbery and felonies started a steep increase in 1987" (Kelling & Coles, 1996, pp. 117-118).

With the beggar and panhandler population negatively affecting the subway system and the city as a whole, the New York Transit Authority appointed Chief William Bratton as Chief of the transit police, and Bratton (along with George Kelling) were tasked with addressing the "underworld's" disorderly behavior and crime predicament.

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[7] For a full discussion on the NYPD prior to 1994, see White (2014) and Lardner and Repetto (2001).

Through the use of a broken windows-based enforcement strategy, officers began

remedying social and physical disorder by arresting and ejecting "miscreants" in the

subway system. In the subsequent two years, there was a 30 percent reduction in felony

crimes and individuals began feeling a sense of safety in their subway system (Joanes,

2000). Given the success of Chief Bratton's enforcement strategy, Mayor Rudy Giuliani

eventually named him as the Commissioner of the NYPD in 1993.

Beginning in 1994, the NYPD altered its policing tactics to reflect the theoretical

underpinnings of Broken Windows theory.[8] Under this perspective, it was argued that

minor forms of disorder had a contagious effect that exacerbated more serious crime

problems. If the police did not address various forms of social and physical disorder, law-

abiding citizens would refrain from exercising informal social control and community

regulation, which would ultimately invite more serious offenders to the neighborhood

(See Wilson & Kelling, 1982). Consequently, the more serious offenders would engender

a cycle that bred more disorder whereby community standards broke down and crime

would begin to flourish. In order to restore the neighborhood back to normalcy, the police

were supposed to aggressively focus efforts on minor forms of social and physical

disorder so that law-abiding citizens could strengthen the dynamics of social regulation

and social control (Wilson & Kelling, 1982). While early research tended to support the

use of broken windows tactics (Skogan, 1990; Kelling & Coles, 1996; Sampson &

Cohen, 1988), Harcourt (1998) and Sampson and Raudenbush (1999) would later

question the relationship between crime and disorder. In Harcourt's (1998) reanalysis of

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[8] COMPSTAT was adopted at the same time as the OM policing strategy and SQF. A full discussion of COMPSTAT is outside the scope of this dissertation, and readers should refer to McDonald (2002) and White (2014) for more detail on COMPSTAT in NYC.

Skogan's (1990) data, he found numerous inconsistencies and errors in measurement, and as a result, he failed to replicate Skogan's (1990) support for Broken Windows theory. Similarly, Sampson and Raudenbush (1999) found that crime was not related to disorder, but rather, the relationship is confounded by social interactions and social controls among neighbors (i.e., collective efficacy).

Despite the empirical doubts, Broken Windows theory continued to influence American policing, which would eventually be translated into a policing strategy known as "order-maintenance policing" or OMP (Livingston, 1997). Similar to Broken Windows theory, OMP took a zero tolerance stance against social disorder (e.g., public drunkenness, vandalism, loitering, panhandling, prostitution, etc.), but also embraced tenets derived from early movements toward community policing. In theory, this meant that OMP would combat disorder while avoiding coercive encounters with citizens on the street. Essentially, police should not only focus on protecting communities from criminal invasions but also the individuals residing in them. The problem, however, is that "New York moved in a very different direction, exchanging amelioration of physical disorder for interdiction of social disorder" (Fagan & Davies, 2000, p. 468). Hence, instead of adhering to a new set of standards premised on social interactions with law-abiding citizens, the NYPD encouraged the aggressive pursuit of disorderly people through indicators of stops and arrests (Waldeck, 1999).

Even though Kelling and Cole (1996) perceived OMP as being jointly defined by citizen and police efforts, there was a tactical shift amongst the NYPD to focus primarily on social disorder with the implementation of two policies. First, the *Reclaiming the Public Spaces of New York* initiative reconstructed the Broken Window theory such that

streets were targeted through systematic and aggressive enforcement strategies aimed at low-level social disorder. The second policy implemented was the *Getting Guns off the Streets of New York* (NYPD, 1994b). This proposal aimed at reducing gun violence through means of seizing illegal firearms by thoroughly investigating incidents and arrests involving guns and following-up on leads (Smith & Bratton, 2001). The combination of OMP with "gun-oriented policing" was thought to act as a potential deterrence against gun-related crimes because "[s]topping people on minor infractions also made it riskier for criminals to carry guns in public" (Davis & Mateu-Gelabert, 1999, p. 1). In the subsequent three years, the NYPD was able to confiscate more than 50,000 guns, resulting in 40,000 gun-related arrests (Wintemute, 2006).

The two aforementioned policies resulted in policing tactics that strayed from the original contentions of Broken Windows theory. First, the NYPD's version of policing social disorder emphasized arresting and prosecuting individuals who committed disorder offenses. During police stops, individuals were often questioned and checked for outstanding police warrants (Fagan & Davies, 2000). In short, rather than preventing disorder from snowballing into more serious crime, policing disorder offenses became a way to remove weapons and wanted criminals from the community. Second, community-oriented policing was reinvented such that it no longer emphasized interactions between police and community leaders. Instead, Bratton embraced a management style from the private sector (Hammer & Champy, 1993) that stressed innovative approaches on management accountability, prioritization, and information based decision-making (Willis, Mastrofski, & Weisburd, 2007). The outcome of such changes included various structural modifications and the development and implementation of Compstat, a

computer management system "defined by timely and accurate information, rapid deployment of resources, effective tactics, follow-up, and assessment" (White, 2014, p. 8). Essentially, the NYPD relied upon its data-driven accountability system (i.e., Compstat) to identify community needs rather than engaging the citizens residing in them.

In a more recent effort to combat crime, the NYPD initiated Operation Impact to focus police resources within precinct localities where crime is concentrated (i.e., "Impact Zones"). Based on data from crime analysts, commanders identified 24 Impact Zones to deploy police resources (Golden & Almo, 2004). As Weisburd, Telep, and Lawton (2014) state, "The goal is to use saturation foot patrol in combination with resources from a variety of departmental divisions to target these high crimes areas" (p. 137). Although SQFs were first adopted under William Bratton in the 1990s, it is important to note that SQFs were an integral part of Operation Impact. Once the program started, the number of SQFs grew exponentially over the next decade (Ridgeway, 2007; Smith & Purtell, 2007). Evaluation research examining Operation Impact suggests that it was one of the main factors contributing to the crime reduction within targeted precincts (Smith & Purtell, 2007).

OMP, Street Stops, and Race

Although stop and frisk interventions were never formally acknowledged in official documents, they became an integral component of OMP in order to inspect low-level disorder (Kelling & Cole, 1990). As critics have pointed out, OMP tactics created opportunities (i.e., the stop) that led to searches and arrests (Waldeck, 1999). As Fagan and Davies (2000) state, "Stops for minor crimes or infractions were easier to justify

under a lower constitutional standard (i.e., 'reasonable suspicion') than stops for more

serious offenses" (p. 476). Under OMP, therefore, many of the stops that focused on

social disorder would grant police the opportunity to search suspects for contraband and

weapons and make arrests. In fact, the number of misdemeanor arrests increased from

129,404 in 1993 (the year before OMP was implemented) to 215,158 in 1998 (Fagan &

Davies, 2000). As Figure 1 demonstrates below, the number of stop and frisks continued

to increase until 2011, where it reached its pinnacle at 685,724 SQFs.
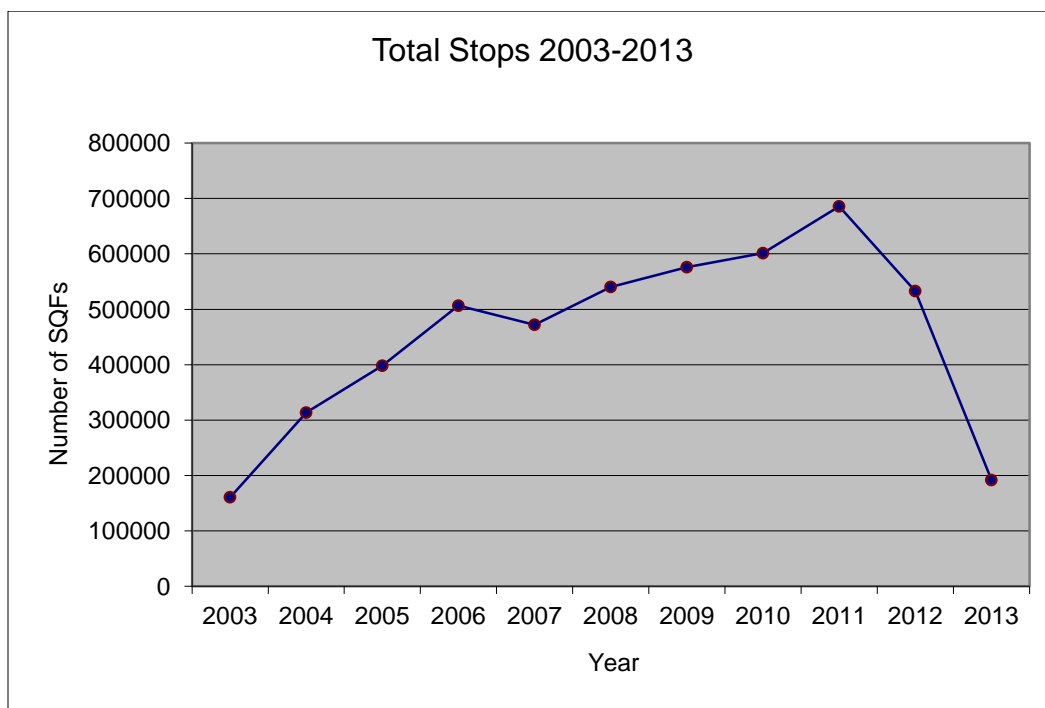
Figure 1. Total number of SQFs from 2003 through 2013.
Source: 2003-2013, NYPD Website

       Crime Control and SQF Tactics in New York City. Whether stop-question-

frisk (SQF) tactics have been effective at reducing crime in New York City is a hotly

contested debate among many individuals. On the one hand, the NYPD is adamant that

the implementation of SQF tactics is one of the primary driving forces behind the crime

decline in New York City. Proponents of stop and frisk tactics generally highlight

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evidence from several different sources. First, in the years following the implementation of SQFs, the NYPD was able to confiscate more than 50,000 guns, resulting in 40,000 gun-related arrests (Wintemute, 2006). Second, in the 20 years since the NYPD began relying on SQFs, there has been a 75% decline in street crimes in New York City. As Zimring (2007, 2012) points out, New York City's crime decline was substantially greater, roughly twice the national decline. Moreover, Kelling and Sousa (2001) concluded that policing reforms, which included SQFs, had a large effect on crime in New York City. Specifically, there was an inverse relationship between violent crime rates and misdemeanor arrests across police precincts.

On the other hand, there are a number of studies indicating that the relationship between SQFs and the crime decline in New York City is modest to negligible at best. Those modest findings suggest that reductions in the crack-cocaine market, through order-maintenance policing and SQF tactics, had a small effect on overall crime trends in New York City (Cerda et al., 2009; Cerda et al., 2010; Messner et al., 2007; Rosenfeld et al., 2007). Similarly, Weisburd and colleagues (2014) found that the concentration of SQFs in particular areas was one of the ways in which the NYPD was able to maintain its low crime rates over the years despite having less resources. In contrast to these studies, others have highlighted the ineffective nature of SQFs in reducing crime. Rosenfeld and Fornango (2014), for instance, found that police stops did not decrease robbery and burglary rates. Harcourt and Ludwig (2006) also failed to find a significant relationship between policing minor disorder offenses and New York City's crime decline. Such findings have led Fagan and colleagues (2010) to conclude that there appears to be a declining return in crime detection from marginal increases SQF enforcement strategies.

Street Stops and Race. The NYPD's implemented OMP (in conjunction with SQFs) in a manner that disproportionately affected ethnic minorities. According to a report by the Civil Rights Bureau (1999), stops were primarily focused in poor neighborhoods with high concentrations of Blacks and Hispanics. Even in neighborhoods with low ethnic minority concentrations, Black and Hispanic stop rates were still well above their population percentage. By the end of the 1990s, SQF procedures became a point of contention among ethnic minorities. As Fagan, Geller, Davies, and West (2010) indicated, "[i]n a fifteen-month period from January 1998 through March 1999, non-Hispanic Black, Hispanic Black, and Hispanic White New Yorkers were three times more likely than their White counterparts to be stopped and frisked on suspicion of weapons or violent crimes" (p. 310). While the NYPD claimed that such disparities reflected the higher participation of Blacks and Hispanics in crime, these assertions were later disproved when Blacks and Hispanics were still significantly more likely to be stopped than whites even after controlling for the population composition of the precinct and various crime types. Moreover, Black and Hispanics were also more likely than Whites to be stopped without constitutional justification (Civil Rights Bureau, 1999). SQFs are still concentrated in the police precincts (i.e., Brownsville, East New York, Central Harlem, East Harlem, Bedford Stuyvesant, and Mott Haven) where residents are predominately Black or Hispanic.

Research continues to document the disparate treatment of ethnic minorities in SQF procedures in New York City. In a recent study by Fagan and colleagues (2010) on SQF in New York City, they identified three noteworthy findings.

First, stops within neighborhoods take place at rates in excess of what would be predicted from the separate and combined effects of population demography, physical and social conditions, and the crime rate. This excess seems to be concentrated in predominately Black neighborhoods. Second, the excess stops in these neighborhoods persist over time, even as the Black population declines, crime rates remain low and effectively unchanged, the City's overall social and economic health improves, and housing and other investments increase across the City's neighborhoods, including its poorest and most segregated neighborhoods. Third, there appears to be a declining return in crime detection from marginal increases in enforcement, and this efficiency gap seems to grow over time. (p. 337)

For all of these reasons, ethnic minority citizens generally perceived OMP and SQF tactics by the NYPD as a form racial profiling. As Fagan et al. (2010) conclude, SQF tactics lack any type of tangible return and marginalizes people by race and place. Specifically, even as stop rates have increased drastically for Blacks from 2003 to 2006, hit rates (i.e., the rate at which stops results in arrest) have steadily declined for Blacks. Furthermore, despite a 300 percent increase in SQFs from 2003 to 2006, the number of stops that uncovered firearms decreased from a rate of 3.9 firearms per 1,000 stops to 1.4 firearms seized per 1,000 stops. Such findings are of particular concern considering that hit rates are more effective in mixed or White neighborhoods (Fagan et al., 2010, see also Jones-Brown et al., 2010). The totality of these findings suggest that SQFs may not only be limited in its capacity as a policing strategy, but also a mechanism that undermines the social good associated with the NYPD and their legitimacy (Fagan et al., 2010). It should be noted, however, that research examining the NYPD's use of SQF has found mixed results regarding DMC. In collaboration with the NYPD, the RAND Corporation found that significant racial disparities existed in more than 500,000 stops. Specifically, in 2006, Blacks and Hispanics were involved in SQF 53% and 29% of the time, respectively. Although the RAND Corporation found significant results, they concluded

that the findings were not robust enough to incite immediate change, indicating "a large-scale restructuring of the NYPD SQF policies and procedures is unwarranted" (Ridgeway, 2007, p. xiv).

Ethnic Minority Tension: The Collateral Consequences of OMP & SQF

The NYPD's aggressive application of Broken Windows theory through OMP strategies and SQF tactics has evolved in a way that most closely resembles an enforcement strategy that focuses on specific races in poor places—a theme commonly found in research on the minority threat perspective. As Harcourt states (1998), these policing strategies "have little to do with fixing broken windows and much more to do with arresting window breakers—or persons who look like they might break windows" (p. 342). Undoubtedly, such policing tactics have impeded the reconstruction of social control and community regulation (i.e., collective efficacy) in ethnic minority communities because they are unable and unwilling to engage with police in efforts to combat physical and social disorder—a scenario that falls far from Wilson and Kelling's (1982) original *Broken Windows* essay.

Focused policing tactics in predominately Black and Hispanic communities has not only obstructed efforts to manufacture collective efficacy, but it also may have implications related to the legitimacy of law. In ethnic minority neighborhoods where the NYPD carries out aggressive policing strategies, citizens may view the police as being less legitimate because they perceive treatment by the police as being unfair and racially biased. In a recent study carried out by the Vera Institute of Justice, Fratello, Rengifo, and Trone (2013) examined whether being stopped by the NYPD had an effect on 474 young peoples' perceptions of the police. Through in-depth interviews with some of the

residents in New York City (*n* = 42), Fratello et al. (2013) found a number of noteworthy findings.

Table 2.

Summary of Results

> 1) 44 percent of young people surveyed indicated they had been stopped repeatedly—9 times or more.
> 2) Less than a third—29 percent—reported ever being informed of the reason for a stop.
> 3) 71 percent of young people surveyed reported being frisked at least once, and 64 percent said they had been searched.
> 4) 45 percent reported encountering an officer who threatened them, and 46 percent said they had experienced physical force at the hands of an officer.
> 5) One out of four said they were involved in a stop in which the officer displayed his or her weapon.
> 6) 61 percent stated that the way police acted towards them was influenced by their age.
> 7) 57 percent indicated that they were treated worse than others because of their race and/or ethnicity.

Source: Fratello et al. (2013)

In light of these findings, it is not surprising that "88 percent of young people surveyed believe that residents of their neighborhood do not trust the police" (Fratello et al., 2013, p. 2). Extrapolating on these results, ethnic minorities may refrain from complying with the police because they lack trust and confidence in their work (Tyler, 1990). The social costs of diminished legitimacy are far reaching as the police depend on the voluntary cooperation of citizens to prevent and fight crime, which includes reporting crimes and criminals, informally policing their neighborhood, and aiding the court system as witnesses and jurors (Fagan & Davies, 2000). Without these cooperative acts, the police risk being further isolated from the citizens they serve and protect.

  The isolation and demarcation of police through perceptions of illegitimacy may work to reinforce the occupational culture and social norms related to race-specific

policing. In addition to the dynamic structure of the police workplace (Bouza, 1990;

Skolnick & Fyfe, 1993), the insularity of the police may compound the "us-versus-them"

mentality whereby actions by fellow officers are rarely questioned and "matter of fact

prejudices" are developed and buttressed through social norms, beliefs, and perceptions

(Manning & Van Maanen, 1978, p. 267-270). Consequently, this may "give rise to broad

suspicion of criminal activity and intensified enforcement in minority neighborhoods"

(Fagan & Davies, 2000, 501). Within the context of the NYPD, this may translate into

SQF procedures that perpetuate the disparate stop rates of ethnic minorities and place

them in a position where they are more likely to encounter police use of force.

The NYPD and Legal Troubles

Premised in the general deterrence literature, the implementation of SQFs by the

NYPD was a strategy meant to prevent, investigate, detect, and solve crime. As

previously discussed, there was a general sense of fear among New Yorkers in the 1980s

because crime was perceived as plaguing New York City. In an effort to combat this

growing crime trend, the NYPD adopted a number of crime-fighting philosophies,

strategies, and management techniques. In the subsequent years, New York City

experienced one of the largest crime declines in the nation. For example, compared to the

50 percent reduction nationwide, New York City experienced a 66 percent decline in

homicides from 1990 to 1997 (Davis, 1999; see also Weisburd et al., 2014). The NYPD

touted that this decline was the culmination of OMP, SQFs, and Compstat (White, 2013).

Even today, in light of the controversy, the NYPD continues to boast its ability to

prevent, investigate, detect, and solve crime through SQFs. Former New York Police

Commissioner Ray Kelly was recently quoted saying, "It's [SQFs] a practice that's

essential. You can't police without doing it" (Timm, 2013). In the same interview, he would later go on to claim that the NYPD's policing style has saved approximately 7,383 lives. Moreover, according to former Commissioner Kelly, the excessive stop rates of ethnic minorities has less to do with discrimination and more to do with the fact that "New York's minority communities experience a disproportionate share of violent crime" (Timm, 2013).

The widespread deployment SQF has resulted in two major lawsuits on racial profiling. In *Daniels et al. v. the City of New York* (2003), the Center for Constitutional Rights (CCR) challenged the NYPD's use of SQF without reasonable suspicion under the Fourth Amendment and alleged that officers were selectively targeting individuals on the basis of their race and national origin in violation of the Equal Protection Clause of the Fourteenth Amendment to the U.S. Constitution. Of particular concern was the NYPD's Street Crime Unit (SCU). When the lawsuit was filed, the SCU was an elite commando unit comprised of more than 300 officers who patrolled the streets of New York City in unmarked cars and plain clothes. On one night in February 1999, a team of SCU officers shot and killed Amadou Diallo, an unarmed African immigrant, by firing 41 bullets at him while he was standing at the entrance of his Bronx apartment building. The death of Diallo not only ignited citywide demonstrations against police brutality, but it also invited close scrutiny of the SCU. Upon inspection, the New York State Attorney General found that the SCU stopped 16 African-Americans for every arrest made. Upon settling the civil suit, the NYPD was required to maintain a written anti-racial profiling policy, whereby officers and their supervisors were audited to make sure that SQFs were properly documented and based on reasonable suspicion.

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Despite efforts to eliminate racial profiling, the CCR filed a second lawsuit against the NYPD in *Floyd v. City of New York* (2008), alleging that the majority of the NYPD's SQFs transpired in communities of color and lacked reasonable suspicion. While the named plaintiffs in the litigation were David Floyd, Lalit Clarkson, David Ourlicht, and Deon Dennis, they represented hundreds of thousands of New Yorkers who were stopped primarily because of their race or ethnicity. The allegations against the NYPD were supported by the CCR (2009) and Fagan's (2010, 2012) expert opinion. In the CCR's (2009) report, they revealed that 80 percent of the stops made by the NYPD involved Blacks and Latinos, who only represented 25 percent and 28 percent of the City's population respectively. Moreover, between 2005 and 2008, Blacks and Latinos were also more likely to be frisked and have physical force used against them during their stops compared to Whites.[9] Specifically, Blacks and Latinos comprised 85 percent of the individuals frisked by the NYPD, whereas Whites were only frisked 8 percent of the time after the initial stops. Furthermore, force was used 24 percent of the time against Blacks and Latinos and only 17 percent of the time against Whites during the stop. This is particularly concerning given that stops only result in arrests 4 to 6 percent of the time and rarely yielded the discovery of weapons or contraband across all races, suggesting that SQFs are both racially biased and ineffective at controlling crime.

Supplementing the CCR's (2009) report, Jeffery Fagan (2010, 2012) analyzed the NYPD's SQF data from 2004-2009 and then the remaining data from January 2010 through June 2012. Working with the plaintiff, Fagan found support for the CCR's

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[9] This study will expand on the CCR's and Fagan's (2010, 2012) results by examining cross-level interactions between individual and ecological predictors of police use of force.

contention that the NYPD was engaging in unconstitutional stop-and-frisk practices that

targeted predominately Black and Latino New Yorkers. After controlling for crime,

neighborhood context, and the concentration of police officers in specific areas, Blacks

and Latinos were still more likely to be disproportionately affected by SQFs in a number

of ways. Table 3 highlights Fagan's (2010, 2012) major findings with regard to the

Floyd's Fourth and Fourteenth Amendment claims.

Table 3.

Summary of Evidence

Fourth Amendment Claim
• Nearly 150,000, or 6.71% of all discretionary stops lack legal justification. An additional 544,252, or 24.37% of all discretionary stops lack sufficiently detailed documentation to assess their legality.
• Officers rely heavily on two constitutionally problematic stop justifications for nearly half of all stops: furtive movements and proximity to a high crime area.
• Documented stop justifications do little to explain overall variations in stop patterns and do not substantially influence the racial disparities that characterize stop practices between police precincts.
• The rate of gun seizure is .15 percent, or nearly zero, and arrests take place in less than six percent of all stops.
• Black and Hispanic suspects are treated more harshly once the decision is made that a crime has occurred. Black and Hispanic suspects are more likely to be arrested than issued a summons when compared to White suspects. They are more likely to be subjected to use of force.
Fourteenth Amendment Claim
• NYPD stop activity is concentrated in precincts with high concentrations of black and Hispanic residents even after controlling for the influences of crime, social conditions, and the allocation of police resources.
• NYPD stops are significantly more frequent for black and Hispanic citizens than for white citizens, even after adjusting for precinct crime rates, the racial composition, and other social and economic factors predictive of police activity.
• Black and Hispanics are more likely to be stopped than whites even in areas where there are low crime rates and where residential populations are racially heterogeneous or predominantly white.

SOURCE: Fagan, 2010, pp. 3-4

Based on the CCR's (2009) report and Fagan's (2010, 2012) expert opinion, the

Federal District Court Judge Shira Scheindlin ruled that the NYPD was engaging in

unconstitutional stop-and-frisk practices that targeted predominately Black and Latino

New Yorkers. To remedy this problem, the court made several orders. The judge

appointed a monitor, Peter L. Zimroth, to "serve the interests of all stakeholders,

including the City, by facilitating the early and unbiased detection of non-compliance or

barriers to compliance" (*Floyd v. The City of New York*, 2008, p. 676). Such compliance

was supposed to be accomplished through the reformation of policies, training,

supervision, documentation, and disciplinary action, along with the publication of SQF

reports that detail the NYPD's compliance with the ordered reforms. Second, Judge

Scheindlin agreed that the individuals most affected by SQF should be the ones working

with the NYPD to establish immediate reforms, which will be guided by a facilitator that

works with the community and at least one liaison from the NYPD:

> The communities most affected by the NYPD's use of stop and frisk have a
> distinct perspective that is highly relevant to crafting effective reforms. No
> amount of legal or policing expertise can replace a community's understanding of
> the likely practical consequences of reforms in terms of both liberty and safety.
> (*Floyd v. City of New York*, 2008, p. 686)

The last major reform would involve a one-year pilot study whereby police officers in the

75th precinct were supposed to wear body cameras. The purpose of these cameras was to

create a permanent, objective record of stops and frisks conducted by NYPD officers,

which should make it easier to determine if a SQF was constitutional.

In the months following the CCR's landmark victory, a number of proceedings

occurred that affected the case's outcome. Foremost, the City appealed to the U.S. Court

of Appeals for the Second Circuit in order to freeze the reform process. Around the same

time, the police unions filed motions to intervene in *Floyd v. City of New York* (2008)

because they believed that the district court's opinion that the NYPD employed SQFs in a

manner that violated the Fourth and Fourteenth Amendments was incorrect. As stated in

the proposed Intervenor/Appellant Mem. In Opp'n to Defendant/Appellant Mtn for

Limited Remand (2014), "The [d]istrict [c]ourt misconstrued applicable burdens of proof,

misapplied Fourth Amendment jurisprudence, applied Fourteenth Amendment theory that

[p]laintiffs never even presented, and accepted evidence that was insufficient as a matter

of fact and law to prove [p]laintiffs' claims" (pp. 2-3). Upon review of the City's appeal,

the United States Court of Appeals for the Second Circuit halted the reform process and

removed the district court judge for displaying partiality, although it should be noted that

the decision by the Second Circuit did not overturn the substance of the district court's

rulings. Despite its original decision, the Second Circuit issued an order lifting the stay

and remanding the case to the district court in February 2014 so that the City and the

plaintiffs could come to a resolution (*Floyd v. City of New York*, 2014).

The national spotlight surrounding the *Floyd* case not only highlighted the

NYPD's use of SQFs, but it also became a defining feature of the NYC mayoral election,

with candidates both for and against the NYPD's use of the practice. As a result, the

mayoral election became a referendum on SQF in which Bill de Blasio won on an anti-

stop-question-frisk political platform. Following his election, de Blasio eventually

replaced Commissioner Ray Kelly with former Commissioner Bill Bratton, a move that

many New Yorkers opposed because Bratton was one of the original pioneers and

supporters of SQFs. Despite their differences in the utility of SQF, the two did find

common ground in mending the tumultuous relationship between New Yorkers,

especially young men of color, and the NYPD. As de Blasio stated, "The idea here is to

have real reform, to only use stop and frisk when it's constitutionally warranted and

constitutionally applied, and to show communities that we are respecting law abiding

citizens" (Russo, Dienst, & Siff, 2013). Embracing the mayor's viewpoint, Commissioner

Bratton pledged to address NYPD reform through the inclusion of "more oversight, more

guidance, [and] more training; it's all for the good" (Paybarah, 2013). In an effort to

incite police-citizen reclamation in NYC, de Blasio had the city drop its appeal in the

Second Circuit and focus on implementing some of the original reforms devised in

Federal District Court. Since de Blasio's election and the abatement of litigation, the use

of SQFs dropped off precipitously in 2013 ($n = 191,851$) and 2014 ($n = 45,788$), marking

a 64% and 91% decrease from 2012 ($n = 532,911$).

Summary

Considering prior research on SQFs, the NYPD's organizational and operational

changes over the past two decades (i.e., the adoption of OMP, SQF, and Compstat), and

the recent legal troubles involving racial and ethnic profiling, the NYPD provides fertile

ground for exploring the intersection of SQF and racial/ethnic disparities in police use of

force through the lens of the minority threat perspective. Although Fagan's (2010, 2012)

supplemental report identified that Blacks and Hispanics were disparately targeted during

stop-and-frisk practices, it did not delineate about the extent to which they may also be

disproportionately affected by police use of force. While Fagan's (2010, 2012)

supplemental report did not focus exclusively on police use of force, he did find that

force occurred in 21.3 percent of SQFs when the category of "Hands on Suspect" was

excluded from analysis. Furthermore, police used force occurred against Whites, Blacks,

and Hispanics in approximately 15.5, 21.3, and 23.8 percent of SQFs, respectively.

Building on Fagan's initial reports, this dissertation seeks to broaden research on the

intersection of racial profiling, deprivations of liberty, and police use of force, along with

the theoretical breadth of the minority threat perspective.

CHAPTER 4

DATA SOURCES AND METHODS

Collectively, the literature review on police use of force and the theoretical arguments associated with the minority threat perspective suggest that ethnic minorities are disproportionately impacted by formal social control. With this literature as a framework, there are several research questions guiding this study of use of force during Terry stop of citizens by NYPD officers. First, which factors predict use of force across suspect, situational, departmental, and ecological levels of analysis? Second, after controlling for the appropriate micro- and macro-level variables, do police officers use force more often in predominately minority neighborhoods? Lastly, does an individual's race/ethnicity interact with the racial/ethnic composition of a police precinct to produce disparities in police use of force? The following chapter describes the data sources and key variables of interest, along with the analytic methods that will be employed to examine whether police use force during SQF varies by individual, encounter-level, and ecological characteristics.

Sample and Data

The current study investigates the aforementioned research questions by combining the NYPD's 2012 Stop, Question, and Frisk database, which is publicly available online, with data from the U.S. Census Bureau.[10] The NYPD's SQF (2012) dataset contains information on each stop-and-frisk encounter documented by the NYPD

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[10] For a summary of the dependent and independent variables, please refer to Table 1. For the descriptive statistics related to these variables, please refer to Table 2 in Appendix C.

($N = 519,948$). [11] During each encounter, police officers are required to record

information on a UF-250 form, which is later entered into a digital database. The UF-250

forms provide an account of each stop and frisk incident and contain information about

the suspect's demographic characteristics (e.g., sex, race/ethnicity, age, etc.), the location

of the stop, the date and time of the stop, the outcome of the stop, and whether force was

used by the police officer. For a full description of all information recorded, a copy of the

UF-250 form is attached in Appendix A.

In addition to the individual-level and encounter-encounter level characteristics, I

also investigated the macro-level characteristics of the location of the stop. To do this, I

used U.S. Census Bureau data (2010) from the American Community Survey to construct

a data-set at the precinct level ($N = 75$). While researchers examining the effect of

ecological variation on various outcomes strive to meaningfully define "neighborhoods"

(Reiss, 1986; Taylor & Covington, 1988, 1993), prior research indicates that

administratively defined geographical units (i.e., census tracts) are sufficient and often

necessary because of the manner in which many public agencies collect and archive their

data (Sampson, 1997; Sampson & Groves, 1989; Veysey & Messner, 1999).

The U.S. Census Bureau data were aggregated to the police precinct for several

reasons. First, the NYPD records data at the precinct level. In order to maintain congruity

among the measures included in the models, all variables were aggregated to the precinct

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[11] The original 2012 dataset on SQF contained 532,912 cases. Missing data was addressed through listwise deletion, which reduced the sample size by 2.4 percent. Although listwise deletion may lead to wider and/or biased confidence intervals, the small percentage of missing cases suggests this is not an issue (Cheema, 2014; Young, Weckman, & Holland, 2011). Raymond and Roberts (1997) recommend using an alternative to listwise deletion anytime the missing data exceeds 5 percent (see also Young et al., 2011). Importantly, listwise deletion did not remove many cases involving non-weapon (1.6 percent reduction) or weapon force (1.8 percent reduction).

level. Second, from a theoretical standpoint, police precincts may be the most appropriate

unit of analysis because they organize, constrain, and define an officer's understanding of

the city and their relationships with other police officers (Herbert, 1997; Klinger, 1997;

Kane, 2005). Klinger (1997, 2004) contends that research must investigate the geographic

space in which policing is organized (e.g., "police districts" and "police beats") because it

provides the cognitive schemas through which police officers understand crime and the

citizens contained therein. Since police officers are faced with such a unique combination

of social elements in their precinct, they tend to hold a distinct perspective or worldview

through which they see situations and events (Kappeler et al., 1998). Consequently, these

perceptual lenses shape the development of police officers' "working personality" such

that they find unity through the elements of suspicion, danger, and authority (Skolnick,

1966; Muir, 1977; Skolnick & Fyfe, 1994). In short, police precincts may be the most

applicable unit of analysis because "police officers generally develop their enforcement

norms within the context of workgroups assigned to precincts" (Kane, 2005, p. 476).

Dependent Variable

In the SQF database, force was recorded by the NYPD to include "hands,"

"suspect on ground," "suspect against wall," "weapon drawn," "weapon pointed,"

"baton," "handcuffs," "pepper spray," and "other." These nine variables were then

recoded into a single factor variable with three outcomes, where 0 = no force ($N =$

445,928), 1 = non-weapon force (i.e., hands, suspect on ground, suspect against wall, and

handcuffs) ($N = 73{,}416$), and 2 = weapon force (i.e., weapon drawn, weapon pointed,

baton, and pepper spray) ($N = 604$). If an officer indicated that he or she used multiple

forms of force, the highest level of force was coded as the type of force employed during

the encounter (see Terrill & Mastrofski, 2002). Unlike prior research (Mulvey & White, 2014), the current study could not rank order the outcome variable to create a force continuum because the category "other" was ambiguous and did not provide sufficient detail about the type of force falling under this category. Furthermore, police use of force was not operationalized using a dichotomous variable because the degree of force employed has tremendous variation. As previous researchers have demonstrated, if force is employed, police officers generally use numerous forms, ranging from physical to non-physical force (Klinger, 1995; McLaughlin, 1992; Terrill & Mastrofski, 2002; Terrill, 2005; Mulvey & White, 2014). By operationalizing police use of force as a dichotomous variable, researchers are not only holding disparate forms of force to be similar, but they also are failing to identify the kinds of force used in specific contexts.

Independent Variables

  Suspect's race. The suspect's race/ethnicity was constructed using the NYPD's data on SQF. Race/ethnicity was documented on the UF-250 form as Asian/Pacific Islander, Black, American Indian/Alaskan Native, Black-Hispanic, White-Hispanic, White, Unknown, or other. To maintain consistency in the categorization of race/ethnicity between data from the UF-250 forms and the U.S. Census Bureau, race/ethnicity was recoded in the following manner: 0 = White, 1 = Black, 2 = Hispanic (i.e., White-Hispanic & Black-Hispanic), 3 = Asian/Pacific Islander, and 4 = American Indian/Alaskan native, unknown, or other. The inclusion of race/ethnicity not only helps to answer the primary research questions outlined in this dissertation but also corresponds with a robust body of research that highlights the importance of race and ethnicity in the use of both lethal and non-lethal forms of police force (Garner et al., 2002; Reiss, 1980;

Sparger & Glacopassi, 1992; Terrill & Mastrofski, 2002; Walker et al., 2012). For a full summary of the dependent and independent variables refer to Table 4, which is located in Appendix B.

Minority threat. To test the effect of the minority threat perspective on police use of force, tract-level data were obtained from the U.S. Census Bureau for 2010, which were aggregated to the precinct level. Because some of the census tracts overlapped with multiple precincts, data from the U.S. Census Bureau were apportioned to the precinct in which it resided. Apportionment was accomplished by creating a weight variable that reflected the percentage of a census tract that resided in a precinct. The weight variable, therefore, is proportionate to the area of the census tract residing in the precinct. If, for instance, a census tract containing a population of 1,000 individuals was split evenly between two precincts, 500 individuals would be allocated to each precinct. Although the apportionment procedure assumes that the distribution of data is evenly distributed across the census tract (Hipp, 2011), it is advantageous to the centroid procedure, which has been used in previous research (Kane, 2005). Researchers have suggested that the centroid procedure is inaccurate because census-tract data are aggregated to the precinct so long as the census tract's centroid is located within the precinct's boundary line. Using the example from above, this would mean that a census tract's population of 1,000 individuals would be distributed to only one precinct, even though 50 percent of the census tract may reside in another precinct. When aggregating to the precinct, such procedures may skew the results. To avoid the potential for aggregation bias, all census-tract data underwent apportionment (Hipp, 2011).

The racial/ethnic composition variables were created from the U.S. Census Bureau (2010) to reflect the percentage of Blacks and Hispanics in each precinct. Using these percentages, two minority threat variables were created that corresponded to the percent Black and percent Hispanic within each precinct. Although recent research suggests using dynamic measures of the minority threat perspective (Kane et al., 2013), which captures racial and ethnic changes across time, static measures of the minority threat perspective were adequate for analysis because New York City's racial and ethnic composition has not changed drastically over the past ten years. Whereas the Hispanic population increased by eight percent, the Black population decreased by approximately five percent (Department of City Planning, 2010). Furthermore, the static measures still accurately capture the minority threat perspective as outlined by Blalock (1967), and are still used by those testing the theory (Holmes, 2000; Lersch et al., 2008; Kane, 2002; McCarty, Ren, & Zhao, 2012; Parker et al., 2005; Sever, 2001; Smith & Holmes, 2014; Stolzenberg, D'Alessio, & Eitle, 2004; Stults & Baumer, 2007). Also, while previous research tends to include percent black and/or percent Hispanic as part of the concentrated disadvantage index, these variables were excluded from the composite index because it is hypothesized that racial/ethnic composition will predict police use of force independent of concentrated disadvantage. Also, concentrated disadvantage should not be race based. Despite excluding race/ethnicity from the index, multicollinearity was not an issue based on the statistical diagnostics from the variance inflation factor.

Control Variables

       Ecological controls. Controls for violent crime rate, concentrated disadvantage, and residential instability were included in the final models.[12] According to consensus theory, the criminal justice system is a mechanism to control and punish those who violate the law (Liska, Lawrence, & Benson, 1981). Placed in the context of the current study, variations in police use of force may simply parallel the level of infractions against legal order. In line with previous research (Kane et al., 2013), the current study includes precinct-level crime rates. Additionally, composite indexes for concentrated disadvantage and residential instability were created that included measures of both social and economic structure (Kane, 2002, 2005; Sampson & Raudenbush, 1999). The index for concentrated disadvantage included percent persons in poverty, percent households receiving public assistance, percent adult unemployment, percent young men (ages 18-25), percent under eighteen years of age, percent without high school diploma, and percent of female-headed households with dependents. To combat multicollinearity and stay consistent with past research (Sampson & Bartusch, 1998; Kubrin & Weitzer, 2003), principal component analysis was employed. As reported in Table 6, the component for concentrated disadvantage was strongly associated with all measures included in its column (Eigenvalue = 5.21) and had factor loadings above .69. Furthermore, an index for residential instability was also created using principal component analysis, which included measures for percent of individuals residing in same household for one year,

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[12] Before finalizing the ecological controls, a stop-rate variable per 10,000 people was created and included in the models to examine whether increases in stops impacted the odds of force occurring in a precinct. The stop-rate variable was neither significant nor confounded other variables. For sake of parsimony, the stop-rate variable was not included in the final models. Appendix D provides a full breakdown of total number of stops by precinct, along with the number of times police used force.

percent foreign born, and percent vacant houses. These measures were included in the

index because prior research suggests that residential instability attenuates social ties,

thereby increasing opportunities for crime (Bursik & Grasmick, 1993; Kane, 2005;

Sampson & Groves, 1989; Taylor, 1997). The aforementioned measures all loaded highly

on the residential instability component (Eigenvalue = 1.62) and had factor loadings

above .71.

Table 6.

Principal Component Analysis of NYC Census Tract Variables (2010)

	Components	
Variable	Concentrated Disadvantage	Residential Instability
	EV = 5.21	EV =1.62
Percent persons in poverty	.938	--
Percent households receiving public assistance	.938	--
Percent adult unemployment	.691	--
Percent young men (18-25)	.825	--
Percent under eighteen	.831	--
Percent without high school diploma	.892	--
Percent of female-headed households with dependents	.901	--
Percent of individuals residing in same household for one year	--	.711
Percent foreign born	--	.725
Percent vacant houses	--	-.776

Lastly, it should be noted that precincts were tested for spatial interdependence, or

the extent to which precinct-level variables may exert some influence over one another

(see Anselin, Cohen, Cook, Gorr, & Tita, 2000; Bernasco & Block, 2011; Kane, 2005,

2006; Kubrin & Weitzer, 2003; Pfeiffer, Wallace, & Chamberlain, 2014). According to

the Moran's I, which reflects the spillover effects of adjoining precincts, interdependence

was not an issue among precincts for all relevant independent variables at the precinct level (i.e., race/ethnicity, concentrated disadvantage, residential instability, and violent crime rates). Because research suggests that offenders do not travel far to engage in crime (Rossmo, 2000), spatial lags were created and examined for interdependence. Whereas prior research suggests that the average distance decay for offenders to travel is between 1 and 2.5 miles (Pyle, 1974; Hipp, 2007; Pfeiffer et al., 2014), the current study used a distance decay of 7 miles around the precinct's centroid. Compared to past research that focused on smaller units of analysis, precincts are much larger areal units in comparison to census tracts, meaning that the spatial lag must be adjusted to the size difference in order to account for the potential of spatial autocorrelation.

Organizational controls. Data at the organizational level was sparse. The only control included at the organizational level was the precinct's commanding officer's rank. This variable serves as a proxy for "activity" level, or crime. Generally, Inspectors lead the busiest precincts, followed by Deputy Inspectors, and then Captains lead the slowest precincts.

Encounter-level controls. A number of controls were included in the final models to account for aspects of the encounter between police and citizens. The suspect's demeanor towards the officer was measured using two variables: noncompliance (0 = No, 1 = Yes) and whether he or she was verbally threatening (0 = No, 1 = Yes). The empirical evidence suggests that police are more likely to use force in instances where the suspect is resisting compared to those who comply with the officer's requests (Garner et al., 1996; McCluskey & Terrill, 2005; McCluskey et al., 2005; Paoline & Terrill, 2004, 2007; Schuck, 2004; Terrill et al., 2003; Terrill et al., 2008). In addition to these suspect's

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characteristics, controls were included to identify if the suspect was frisked (0 = No, 1 = Yes), searched (0 = No, 1 = Yes), or arrested (0 = No, 1 = Yes). The variable measuring whether an arrest was made is particularly salient because research indicates that police officers are more likely to employ force in situations involving an arrest (Hickman et al., 2008; McCluskey & Terrill, 2005; McCluskey et al., 2005; Paoline & Terrill, 2007; Terrill & Mastrofski, 2002; Terrill et al., 2003). Furthermore, a host of variables were included to delineate why a suspect was frisked and/or stopped, which consisted of violent crime suspected (0 = No, 1 = Yes), weapon suspected (0 = No, 1 = Yes), and engaged in violent crime (0 = No, 1 = Yes). Additionally, measures were included to account for whether weapons (0 = No, 1 = Yes) or contraband (0 = No, 1 = Yes) were found on the suspect. Police officers are more likely to employ force in situations where the suspect is armed and dangerous (McCluskey et al., 2005; Paoline & Terrill, 2007; Sun & Payne, 2004; Terrill & Mastrofski, 2002). Finally, encounter-level variables were included to indicate whether a suspect was in proximity to the offense at the time he or she was stopped (0 = No, 1 = Yes), the officer was in a high crime area (0 = No, 1 = Yes), or the SQF was initiated by dispatch (0 = No, 1 = Yes).

Suspect controls. The suspect controls included in the models consisted of an individual's sex (0 = female, 1 = male), age (continuous variable), height, and weight. For ease of interpretation, age, height, and weight were all centered for analysis. These are necessary controls as prior research has documented that the police are more likely to use force against male suspects than females during police-citizen encounters (Garner et al., 2002; McCluskey et al., 2005; McCluskey & Terrill, 2005; Phillips & Smith, 2000; Sun & Payne, 2004; Terrill & Mastrofski, 2002; Terrill & Reisig, 2003; Terrill, Paoline,

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& Manning, 2003), and younger suspects are more likely to have forced used against them in comparison to their older counterparts (McCluskey & Terrill, 2005; McCluskey et al., 2005; Paoline & Terrill, 2007; Phillips & Smith, 2000; Terrill & Mastrofski, 2002; Terrill & Reisig, 2003; Terrill et al., 2003).

Analytical Strategy

As stated in the beginning of chapter 4, there are three research questions directing this dissertation. First, which factors predict use of force across suspect, situational, departmental, and ecological levels of analysis? Second, after controlling for the appropriate micro- and macro-level variables, do police officers use force more often in predominately minority neighborhoods? Lastly, does an individual's race/ethnicity interact with the racial/ethnic composition of a police precinct to produce disparities in police use of force?

In order to examine the three questions above, this dissertation employed two-level hierarchical multinomial logistic regression (HMLR) models because of the structure of the dependent variable and the nested nature of the dataset (Raudenbush & Bryk, 2002). Since there were more than two discrete outcomes (i.e., 0 = no force, 1 = non-weapon force, and 2 = weapon force), multinomial logistic regression was deemed as most appropriate, with no force being the baseline reference category. Multinomial logistic regression was also selected because the relationship between each pair of outcome groups was not the same, meaning it did not meet the assumption of proportional odds as is the case when using ordinal logistic regression. Using multiple HMLR models in the following chapter, each research question will be answered as it pertains to non-weapon and weapon force. Furthermore, because data on SQF practices

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(i.e., level-1 covariates) occurred across the contexts of 75 precincts (i.e., level-2 covariates), there was the potential that individual cases may violate the assumption of independence and produce biased estimates. In other words, it is highly improbable that police use of force and SQF practices are independent of grouping characteristics at the precinct level. That being said, multinomial logistic regression was coupled with a hierarchical modeling strategy to capture the complex error structure of level-1 and level-2 covariates (Raudenbush & Bryk, 2002).[13]

The equations below describe how hierarchical multinomial logistic regression will help answer the research questions posed in this dissertation. The first equation corresponds to Tables 8 and 9 in chapter 5, which report results relevant to the first two research questions.

Level-1 Model

Prob[Y(1) = 1|B] = P(1)
Prob[Y(2) = 1|B] = P(2)
Prob[Y(3) = 1|B] = P(3) = 1 - P(1) - P(2)

log[P(1)/P(3)] = B0(1) + B1(1)*(ARREST_M) + B2(1)*(FRISKED) +
B3(1)*(SEARCHED) + B4(1)*(CONTRABA) + B5(1)*(RADIORUN) +
B6(1)*(FRISK_VI) + B7(1)*(FRISK_SU) + B8(1)*(PROXIMIT) + B9(1)*(STOP_FIT)
+ B10(1)*(FRISK_NO) + B11(1)*(FRISK_VE) + B12(1)*(STOP_ENG) +
B13(1)*(HIGHCRIM) + B14(1)*(GENDER) + B15(1)*(AGE) + B16(1)*(WEIGHT) +
B17(1)*(ASIAN_IN) + B18(1)*(BLACK_IN) + B19(1)*(HISPANIC) +
B20(1)*(OTHER2_I) + B21(1)*(WEAPON_F) + B22(1)*(HEIGHT_I) +
B23(1)*(AGE2)

log[P(2)/P(3)] = B0(2) + B1(2)*(ARREST_M) + B2(2)*(FRISKED) +
B3(2)*(SEARCHED) + B4(2)*(CONTRABA) + B5(2)*(RADIORUN) +
B6(2)*(FRISK_VI) + B7(2)*(FRISK_SU) + B8(2)*(PROXIMIT) + B9(2)*(STOP_FIT)

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[13] Prior to employing HMLR, diagnostics were run to make sure clustering was not an issue. Although there were some precincts with higher and lower counts of force, they did not pose a problem. Leverage diagnostics indicate that the results were not affected by outliers.

+ B10(2)*(FRISK_NO) + B11(2)*(FRISK_VE) + B12(2)*(STOP_ENG) +
B13(2)*(HIGHCRIM) + B14(2)*(GENDER) + B15(2)*(AGE) + B16(2)*(WEIGHT) +
B17(2)*(ASIAN_IN) + B18(2)*(BLACK_IN) + B19(2)*(HISPANIC) +
B20(2)*(OTHER2_I) + B21(2)*(WEAPON_F) + B22(2)*(HEIGHT_I) +
B23(2)*(AGE2)

Level-2 Model

B0(1) = G00(1) + G01(1)*(BLACK) + G02(1)*(HISPANIC) + G03(1)*(CONCENTR) +
G04(1)*(RESIDENT) + G05(1)*(VIOLENT) + G06(1)*(CAPTAIN) +
G07(1)*(DEPUTYI) + U0(1)
  B1(1) = G10(1)
  B2(1) = G20(1)
  B3(1) = G30(1)
  B4(1) = G40(1)
  B5(1) = G50(1)
  B6(1) = G60(1)
  B7(1) = G70(1)
  B8(1) = G80(1)
  B9(1) = G90(1)
  B10(1) = G100(1)
  B11(1) = G110(1)
  B12(1) = G120(1)
  B13(1) = G130(1)
  B14(1) = G140(1)
  B15(1) = G150(1)
  B16(1) = G160(1)
  B17(1) = G170(1)
  B18(1) = G180(1) + U18(1)
  B19(1) = G190(1) + U19(1)
  B20(1) = G200(1)
  B21(1) = G210(1)
  B22(1) = G220(1)
  B23(1) = G230(1)

B0(2) = G00(2) + G01(2)*(BLACK) + G02(2)*(HISPANIC) + G03(2)*(CONCENTR) +
G04(2)*(RESIDENT) + G05(2)*(VIOLENT) + G06(2)*(CAPTAIN) +
G07(2)*(DEPUTYI) + U0(2)
  B1(2) = G10(2)
  B2(2) = G20(2)
  B3(2) = G30(2)
  B4(2) = G40(2)
  B5(2) = G50(2)
  B6(2) = G60(2)
  B7(2) = G70(2)

B8(2) = G80(2)
B9(2) = G90(2)
B10(2) = G100(2)
B11(2) = G110(2)
B12(2) = G120(2)
B13(2) = G130(2)
B14(2) = G140(2)
B15(2) = G150(2)
B16(2) = G160(2)
B17(2) = G170(2)
B18(2) = G180(2) + U18(2)
B19(2) = G190(2) + U19(2)
B20(2) = G200(2)
B21(2) = G210(2)
B22(2) = G220(2)
B23(2) = G230(2)

The second equation corresponds to Tables 10 and 11 in chapter 5, which report results relevant to the last research questions involving the cross-level interaction. In summation, HMLR is not only advantageous given the structure of the dependent variable and the nested nature of the dataset, but it also provides a modeling technique for "proper estimation of cross-level interaction effects" (Johnson et al., 2008, p. 765, see also Wang & Mears, 2010; Ulmer & Johnson, 2004).

Level-1 Model

Prob[Y(1) = 1|B] = P(1)
Prob[Y(2) = 1|B] = P(2)
Prob[Y(3) = 1|B] = P(3) = 1 - P(1) - P(2)

log[P(1)/P(3)] = B0(1) + B1(1)*(ARREST_M) + B2(1)*(FRISKED) +
B3(1)*(SEARCHED) + B4(1)*(CONTRABA) + B5(1)*(RADIORUN) +
B6(1)*(FRISK_VI) + B7(1)*(FRISK_SU) + B8(1)*(PROXIMIT) + B9(1)*(STOP_FIT)
+ B10(1)*(FRISK_NO) + B11(1)*(FRISK_VE) + B12(1)*(STOP_ENG) +
B13(1)*(HIGHCRIM) + B14(1)*(GENDER) + B15(1)*(AGE) + B16(1)*(WEIGHT) +
B17(1)*(ASIAN_IN) + B18(1)*(BLACK_IN) + B19(1)*(HISPANIC) +
B20(1)*(OTHER2_I) + B21(1)*(WEAPON_F) + B22(1)*(HEIGHT_I) +
B23(1)*(AGE2)

log[P(2)/P(3)] = B0(2) + B1(2)*(ARREST_M) + B2(2)*(FRISKED) +
B3(2)*(SEARCHED) + B4(2)*(CONTRABA) + B5(2)*(RADIORUN) +
B6(2)*(FRISK_VI) + B7(2)*(FRISK_SU) + B8(2)*(PROXIMIT) + B9(2)*(STOP_FIT)
+ B10(2)*(FRISK_NO) + B11(2)*(FRISK_VE) + B12(2)*(STOP_ENG) +
B13(2)*(HIGHCRIM) + B14(2)*(GENDER) + B15(2)*(AGE) + B16(2)*(WEIGHT) +
B17(2)*(ASIAN_IN) + B18(2)*(BLACK_IN) + B19(2)*(HISPANIC) +
B20(2)*(OTHER2_I) + B21(2)*(WEAPON_F) + B22(2)*(HEIGHT_I) +
B23(2)*(AGE2)

Level-2 Model

B0(1) = G00(1) + G01(1)*(BLACK) + G02(1)*(HISPANIC) + G03(1)*(CONCENTR) +
G04(1)*(RESIDENT) + G05(1)*(VIOLENT) + G06(1)*(CAPTAIN) +
G07(1)*(DEPUTYI) + U0(1)
      B1(1) = G10(1)
      B2(1) = G20(1)
      B3(1) = G30(1)
      B4(1) = G40(1)
      B5(1) = G50(1)
      B6(1) = G60(1)
      B7(1) = G70(1)
      B8(1) = G80(1)
      B9(1) = G90(1)
      B10(1) = G100(1)
      B11(1) = G110(1)
      B12(1) = G120(1)
      B13(1) = G130(1)
      B14(1) = G140(1)
      B15(1) = G150(1)
      B16(1) = G160(1)
      B17(1) = G170(1)
      B18(1) = G180(1) + G181(1)*(BLACK) + U18(1)
      B19(1) = G190(1) + G191(1)*(HISPANIC) + U19(1)
      B20(1) = G200(1)
      B21(1) = G210(1)
      B22(1) = G220(1)
      B23(1) = G230(1)

B0(2) = G00(2) + G01(2)*(BLACK) + G02(2)*(HISPANIC) + G03(2)*(CONCENTR) +
G04(2)*(RESIDENT) + G05(2)*(VIOLENT) + G06(2)*(CAPTAIN) +
G07(2)*(DEPUTYI) + U0(2)
      B1(2) = G10(2)
      B2(2) = G20(2)
      B3(2) = G30(2)
      B4(2) = G40(2)

B5(2) = G50(2)
B6(2) = G60(2)
B7(2) = G70(2)
B8(2) = G80(2)
B9(2) = G90(2)
B10(2) = G100(2)
B11(2) = G110(2)
B12(2) = G120(2)
B13(2) = G130(2)
B14(2) = G140(2)
B15(2) = G150(2)
B16(2) = G160(2)
B17(2) = G170(2)
B18(2) = G180(2) + G181(2)*(BLACK) + U18(2)
B19(2) = G190(2) + G191(2)*(HISPANIC) + U19(2)
B20(2) = G200(2)
B21(2) = G210(2)
B22(2) = G220(2)
B23(2) = G230(2)

CHAPTER 5

RESULTS

The following chapter is separated into three sections. First, the findings will be

presented to determine which variables predict use of force across suspect, situational,

departmental, and ecological levels of analysis. Then, the results will be used to establish

if police officers use force more often in predominately minority neighborhoods. In other

words, this section will help to ascertain whether the minority threat perspective provides

a viable explanation for police use of force during NYPD stop and frisk practices. Lastly,

the analysis will tease out a more nuanced aspect of the minority threat perspective by

examining whether an individual's race/ethnicity interacts with the racial/ethnic

composition of a police precinct to produce disparities in police use of force.

As stated in Chapter 4, this dissertation employs hierarchical multinomial logistic

regression (HMLR) to answer all three research questions. Before running these models,

however, it is critical to determine how much the dependent variable randomly varies at

the precinct level. If there is no variation, HMLR may not be the most appropriate

statistical technique. To capture this variation, a variance component model was

calculated to gage variation of the dependent variable at the precinct level, which is

reported in Table 7.

Table 7

Variance Component Model

Random Effect (df = 74)	St. Dev	Variance Component	Chi-Square
Intercept 1(0)	1.041	1.0841	3273.740***
Intercept 1(1)	0.657	0.431	30,853.876***

The significant chi-square results indicate that there is variation in the dependent variable at the precinct level, meaning that HMLR is an appropriate modeling strategy. Furthermore, the intra-class correlation is equal to .284 (i.e., 0.431/(1.084+0.431)), which suggests police use of force incidents are not independent of each other but rather are partially related to one another because they are nested within precincts.

Research Question 1: Which factors predict use of force across suspect, situational, departmental, and ecological levels of analysis?

Suspect Characteristics

Several suspect characteristics were significant in both the non-weapon and weapon force models. As presented in Table 7, Black and Hispanic individuals had higher log odds of having non-weapon force used against them by the NYPD compared to their White counterparts. Specifically, the odds of Blacks and Hispanics having non-weapon force used against them were approximately 12% and 8% greater than Whites. These findings not only reinforce prior literature that continue to document racial and ethnic disparities in police use of force (Walker et al., 2012), but they also confirm the ruling of the Federal District Court judge that the NYPD is engaging in racially and ethnically biased policing practices. The other suspect characteristics were not significant (i.e., Asian, Other, sex, age, age^2, height and weight) for non-weapon force. Similarly, few suspect characteristics were significant in the weapon-force model. One noticeable difference between Table 8 and Table 9 is that Blacks and Hispanics did not have higher log odds of having weapon force used against them by the police. Such differences may be due to the amount of discretion police officer have when using non-weapon force, whereas departments may have policies in place for weapon force. The only suspect

characteristic that was significant in the Table 8 was weight, indicating that heavier individuals had higher odds of having weapon force used against them in comparison to those that were lighter in weight.

Table 8.

Final Model: Non-weapon force vs. No force

	Coefficient	Odds Ratio	T-Ratio
Independent Variables			
Precinct Level (*N* = 75)			
Intercept	-3.319	0.036***	-10.391
Percent Black	0.003	1.003	0.650
Percent Hispanic	0.011	1.011	1.933
Concentrated Disadvantage	-0.043	0.957	-0.303
Residential Instability	-0.102	0.903	-1.466
Violent Crime Rate	-0.000	1.000	-0.781
Captain	-0.596	0.551**	-3.361
Deputy Inspector	-0.352	0.704	-1.825
Individual Level (*N* = 519,948)			
Black	0.110	1.116**	3.074
Hispanic	0.073	1.076**	2.704
Asian	0.027	1.027	0.514
Other	0.010	1.010	0.200
Sex	0.034	1.035	0.911
Age	0.003	1.003	0.818
Age^2	-0.000	1.000	-1.238
Height	-0.001	0.999	-0.237
Weight	0.000	1.000	1.263
High Crime Area	-0.049	0.952	-1.397
Proximity to Offense	0.120	1.127*	2.399
Radio Run	0.094	1.098	1.670
Arrested	0.288	1.333***	4.554
Frisked	2.476	11.892***	36.192
Searched	0.490	1.634***	8.343
Contraband Found	-0.038	0.962	-0.553
Weapon Found	-0.112	0.894*	-2.012
S: Fits Description	0.150	1.162***	4.170
S: Engaged in Violence	0.148	1.159**	2.893
F: Suspected Weapon	-0.046	0.955	-0.942
F: Suspected Violent Crime	0.042	1.042	0.869
F: Noncompliance	0.148	1.160*	2.502
F: Verbal Threats	-0.306	0.736*	-2.507

References: Inspector, white, male, & R: not listed
*p<.05; **p<.01; ***p<.001.

Situational Characteristics

In line with previous research (Hickman et al., 2008; McCluskey et al., 2005; McCluskey & Terrill, 2005; Mulvey & White, 2014; Paoline & Terrill, 2004, 2007), the most robust predictors of police use of force were at the situational, or encounter, level. As indicated in Table 8, a significant positive relationship exists between non-weapon force and numerous situational control variables including proximity to offense, arrested, frisked, searched, s: fits description, s: engaged in violence, and f: noncompliance.[14] These positive associations are likely due to several factors. In the process of arresting, frisking, or searching a suspect, police officers must use some kind of force, specifically force involving their hands. This may explain why individuals who were arrested, frisked, or searched had log odds of having non-weapon force used against them that were approximately 33%, 1089%, and 63% greater than their respective counterparts. Furthermore, individual who engage in violence or do not comply with an officer's orders may be viewed as threatening, meaning they are more inclined to use force. Their log odds of having non-weapons force used against them by the NYPD were approximately 16% higher compared to their references categories. Lastly, individuals found within proximity of the offense had log odds of having non-weapon force used against them that were about 13% higher than those that were not in proximity. Due to their proximity to the offense, the NYPD may have thought they were the perpetrator or an accomplice.

Conversely, lower log odds that police officers used non-weapon force were associated with weapon found and whether a suspect was verbally threatening. Specifically, the log odds that police officers used non-weapon force against suspects

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[14] For details about the variables, refer to Table 4 in Appendix B.

who were frisked and then later found to be carrying a weapon were about 11% lower

than when a weapon was not found. Although this findings runs contrary to the literature

on police use of force and encounters involving a weapon, there may be an explanation.

The manner in which the NYPD uncovered these weapons was through the process of

SQF, meaning that the suspect did not pull out a weapon unexpectedly and try to use it on

the officer. The weapon was found while the suspect was under the control of officers.

Lastly, the log odds that police officers used non-weapon force against verbally

threatening suspects were roughly 26% lower than those who were not verbally

threatening. These verbal threats also occurred in the process of frisking the suspect.

Despite the threats, the officers likely new there was no real threat as the suspect was

already under their control as part of the SQF process.

Similar patterns of statistical significance emerged in Table 9. Although the

situational control variables were still strong predictors of police use of weapon force,

their robustness was weaker than the relationships in Table 8 (as suggested by the t-ratio).

As suggested in Table 8, a significant positive relationship exists between weapon force

and numerous situational control variables including proximity to offense, frisked,

searched, s: fits description, f: suspected weapon, f: suspected violent crime, and f:

noncompliance. Individuals found within proximity of the offense had log odds of having

weapon force used against them that were about 55% higher than those that were not in

proximity. Additionally, individuals who were frisked or searched had log odds of having

weapon force used against them that were approximately 90% and 124% greater than

their respective counterparts. Furthermore, if suspects fit a description, were suspected of

carrying a weapon, were suspected of engaging in violent crime, or were noncompliant,

their log odds of having weapons force used against them by the NYPD were approximately 90%, 94%, 149%, and 136% higher compared to their references categories. The explanations for these findings should be place in the same context as non-weapon force. For that reason, refer to the explanations to frame these findings. Contrarily, lower log odds that police officers used weapon force were associated with high crime areas. Specifically, individuals had approximately 50% lower log odds of having weapon force used against them in areas police officers perceived as being high crime. Although these findings are counterintuitive, Klinger (1997) suggests that the perceived level of deviance in a particular area may provide police with a way to gauge the appropriate action to take. Accordingly, police officers in high crimes areas may develop a higher threshold for those instances that require weapon force.

Table 9.

Final Model: Weapon force vs. No force

	Coefficient	Odds Ratio	T-Ratio
Independent Variables			
Precinct Level (*N* = 75)			
Intercept	-7.749	0.001***	-14.851
Percent Black	0.006	1.006	1.350
Percent Hispanic	0.001	1.001	0.083
Concentrated Disadvantage	0.136	1.146	0.750
Residential Instability	-0.200	0.819**	-2.891
Violent Crime Rate	-0.001	0.999	-1.977
Captain	-0.541	0.582	-1.778
Deputy Inspector	-0.316	0.729	-1.054
Individual Level (*N* = 519,948)			
Black	0.074	1.077	0.395
Hispanic	0.039	1.040	0.206
Asian	0.242	1.274	0.938
Other	-0.136	0.872	-0.368
Sex	0.257	1.282	1.282
Age	-0.003	0.997	-0.150
Age^2	0.000	1.000	0.298
Height	0.029	1.029	1.775
Weight	0.004	1.003**	2.615
High Crime Area	-0.685	0.504***	-6.630
Proximity to Offense	0.436	1.547**	3.420
Radio Run	0.818	2.266***	5.636
Arrested	-0.284	0.753	-1.761
Frisked	0.640	1.896***	4.622
Searched	0.806	2.240***	4.925
Contraband Found	-0.329	0.720	-1.069
Weapon Found	0.347	1.414	1.431
S: Fits Description	0.643	1.903***	4.930
S: Engaged in Violence	0.288	1.334	1.902
F: Suspected Weapon	0.661	1.937***	3.684
F: Suspected Violent Crime	0.914	2.493***	8.883
F: Noncompliance	0.857	2.357***	6.308
F: Verbal Threats	-1.118	0.327	-1.810

References: Inspector, white, male, & R: not listed
*p<.05; **p<.01; ***p<.001.

Departmental Characteristics

The only control included at the organizational level was the precinct's commanding officer's rank. This variable serves as a proxy for "activity" level, or crime. Generally, Inspectors lead the busiest precincts, followed by Deputy Inspectors, and then Captains lead the slowest precincts. That being said, there was a significant negative association between non-weapon force and Captain-led precincts, with Deputy Inspectors as the reference category. Specifically, the log odds that police officers employed non-weapons force in Captain-led precincts was approximately 45% lower than precincts ran by Deputy Inspectors. These findings suggest that police officers are less likely to use force in precincts with a lower activity or crime level, which is not surprising.

Ecological Characteristics

The composite indexes for concentrated disadvantage and residential instability generally revealed null findings with one exception. Residential instability was significant in the weapon-force model (Table 9). Specifically, precincts that had higher levels of residential instability (i.e., percent of individuals residing in same household for one year, percent foreign born, and percent vacant houses) had lower log odds that police officers used force. This findings may be related to the benign neglect hypothesis, whereby officers careless about patrolling precincts with higher rates of residential instability, and as a result, they are also less likely to use weapon force. Lastly, violent crime rate was not significantly associated with either non-weapon or weapon force. These null findings are likely due to the geographic size of precincts, which diffuses the concentration of crime at smaller units of analysis.

Research Question 2: After controlling for the appropriate micro- and macro-level variables, do police officers use force more often in predominately minority neighborhoods?

The second research question guiding this dissertation is premised in the minority threat literature. Using the minority threat perspective as a framework, it was predicted that police officers may be a political mechanism through which the majority group in society (i.e., Whites) maintains their power and privilege by subjecting the minority group (i.e., ethnic minorities) to greater formal social control (i.e., police use of force). Despite the theoretical underpinnings of the minority threat perspective, percent Black and percent Hispanic did not significantly predict higher or lower log odds that police officers used non-weapon or weapon force in a precinct (see Tables 8 & 9). In the context of stop and frisk activities, therefore, the minority threat perspective did not predict the likelihood that police officers use either types of force. Put simply, the racial and ethnic composition (as measured by percent Black and percent Hispanic) of a neighborhood did not influence the general likelihood that police officers employed force against New Yorkers.

Research Question 3: Does an individual's race/ethnicity interact with the racial/ethnic composition of a police precinct to produce disparities in police use of force?

Moving beyond prior research on the minority threat perspective, this dissertation examined whether an individual's race/ethnicity interacted with the racial/ethnic composition of a precinct to influence police use of force. As indicated in Table 10, Black individuals had lower log odds of having non-weapon force used against them than

Whites in primarily Black precincts. In short, a one unit increase in percent Black decreased a Black individual's log odds of having force used against them by 0.003 compared to Whites. Moreover, these findings run counter to the predictions of the minority threat perspective, which hypothesizes that increases in percent Black should increase the likelihood that police officers employ force against Blacks individuals. Chapter 6 contextualizes this finding using the benign neglect hypothesis, which shares similarities with the minority threat perspective. Also, it should be noted that significant cross-level interactions were only significant for Blacks in the non-weapon force model. Figure 2 illustrates the interactive effect between Black individuals and percent Black on the odds that police officers use force.
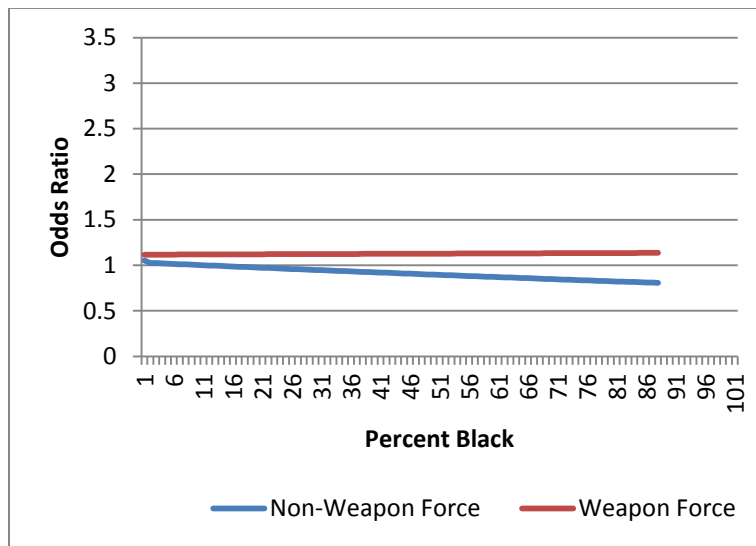

Figure 2. Black by %Black Interaction

Table 10.

Final Model: Non-weapon force vs. No force

	Coefficient	Odds Ratio	T-Ratio
Independent Variables			
Precinct Level ($N = 75$)			
Intercept	-3.399	0.033***	-10.868
Percent Black	0.002	1.002	0.437
Percent Hispanic	0.009	1.009	1.568
Concentrated Disadvantage	-0.041	0.959	-0.297
Residential Instability	-0.101	0.904	-1.454
Violent Crime Rate	-0.000	1.000	-0.762
Captain	-0.600	0.549**	-3.502
Deputy Inspector	-0.358	0.699	-1.896
Cross-Level Interaction			
Black x	0.053	1.054	1.180
Percent Black	-0.003	0.997*	-2.355
Hispanic x	0.120	1.127**	3.540
Percent Hispanic	0.002	1.002*	2.239
Individual Level ($N = 519,948$)			
Asian	0.027	1.027	0.524
Other	0.017	1.017	0.329
Sex	0.034	1.035	0.909
Age	0.003	1.003	0.834
Age^2	-0.000	1.000	-1.259
Height	-0.001	0.999	-0.265
Weight	0.000	1.000	1.257
High Crime Area	-0.049	0.952	-1.395
Proximity to Offense	0.120	1.127*	2.399
Radio Run	0.094	1.098	1.670
Arrested	0.287	1.333***	4.552
Frisked	2.476	11.893***	36.210
Searched	0.491	1.634***	8.344
Contraband Found	-0.038	0.962	-0.550
Weapon Found	-0.112	0.894*	-2.010
S: Fits Description	0.150	1.162***	4.164
S: Engaged in Violence	0.148	1.159**	2.893
F: Suspected Weapon	-0.046	0.955	-0.943
F: Suspected Violent Crime	0.042	1.042	0.868
F: Noncompliance	0.148	1.160*	2.504
F: Verbal Threats	-0.307	0.736*	-2.507

References: Inspector, white, male, & R: not listed
*p<.05; **p<.01; ***p<.001.

Contrary to Blacks, Hispanics not only had higher log odds of having non-weapon force used against them than Whites, but this effect was compounded as percent Hispanic increased in a precinct. For instance, a one unit increase in percent Hispanic increased the log odds of police use of non-weapon force by 0.002 for Hispanics compared to Whites (see Table 11). Furthermore, percent Hispanic also increased the log odds that Hispanics had weapon force used against them compared to their White counterparts. As Figure 3 illustrates, the odds of Hispanics having weapon force used against nearly doubles compared to Whites as percent Hispanic increases from 1% to 74%. These findings reinforce the predictions of the minority threat hypothesis in a more nuanced manner.
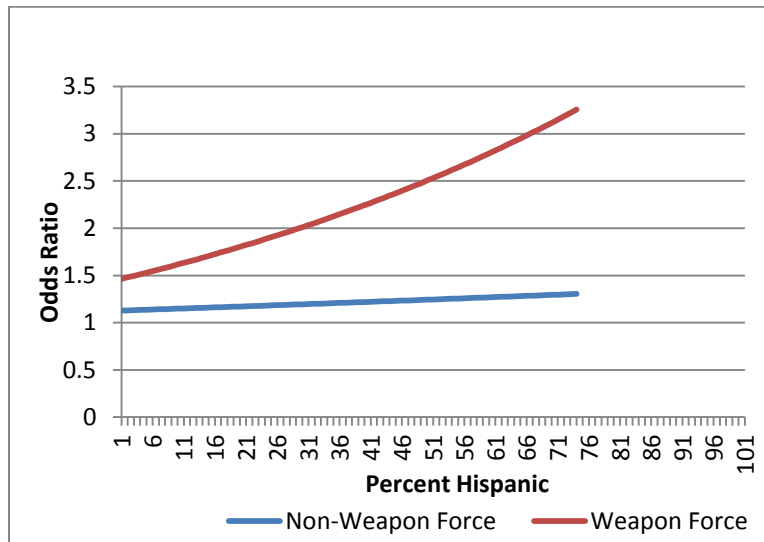

Figure 3. Hispanic by %Hispanic Interaction

Table 11.

Final Model: Weapon force vs. No force

	Coefficient	Odds Ratio	T-Ratio
Independent Variables			
Precinct Level (*N* = 75)			
Intercept	-8.020	0.001***	-14.400
Percent Black	0.003	1.003	0.568
Percent Hispanic	-0.006	0.994	-0.802
Concentrated Disadvantage	0.159	1.172	0.866
Residential Instability	-0.200	0.820**	-2.913
Violent Crime Rate	-0.001	0.999	-1.933
Captain	-0.525	0.591	-1.679
Deputy Inspector	-0.310	0.733	-1.005
Cross-Level Interaction			
Black x	0.109	1.115	0.487
Percent Black	0.000	1.000	0.004
Hispanic x	0.295	1.343	1.398
Percent Hispanic	0.011	1.011*	2.360
Individual Level (*N* = 519,948)			
Asian	0.247	1.281	0.954
Other	-0.113	0.893	-0.305
Sex	0.257	1.292	1.278
Age	-0.003	0.997	-0.123
Age^2	0.000	1.000	0.272
Height	0.028	1.028	1.740
Weight	0.004	1.004**	2.603
High Crime Area	-0.684	0.505***	-6.605
Proximity to Offense	0.437	1.548**	3.432
Radio Run	0.819	2.268***	5.649
Arrested	-0.281	0.754	-1.751
Frisked	0.639	1.895***	4.628
Searched	0.806	2.239***	4.922
Contraband Found	-0.328	0.720	-1.065
Weapon Found	0.351	1.420	1.446
S: Fits Description	0.642	1.900***	4.922
S: Engaged in Violence	0.289	1.335	1.906
F: Suspected Weapon	0.661	1.937***	3.682
F: Suspected Violent Crime	0.913	2.492***	8.848
F: Noncompliance	0.859	2.360***	6.318
F: Verbal Threats	-1.121	0.326	-1.815

References: Inspector, white, male, & R: not listed
p<.05; **p*<.01; ***p*<.001.

CHAPTER 6

DISCUSSION

> An African-American woman in New Orleans was admitted into the hospital for a pregnancy termination. Two weeks later she received a check for $5,000. She phoned the hospital to ask who it was from. The hospital said, 'Crimestoppers.' (Department of Justice, 2015, p. 72)

In a recent investigation prompted by the death of Michael Brown, the Department of Justice (DOJ) uncovered that racial biases toward the African-American community was omnipresent in the Ferguson Police Department. The quote above is one of many taken from the email exchanges between fellow officers within the department. The permissibility of such implicit and explicit racial biases within the Ferguson Police Department not only facilitated a "brotherhood" of prejudice and discrimination behind closed doors, but it also permeated policing tactics in the community, which eventually led to disintegrating police-community relations, diminishing police legitimacy, and rioting throughout the city of Ferguson, Missouri.

Although this dissertation does not pertain to the recent events that unfolded in Missouri, the Ferguson Police Department serves as a hyperbolic example of what could happen in New York City if the NYPD continues to police in a manner that the Federal District Court Judge deemed to predominately target Black and Latino New Yorkers. Judge Shira Scheindlin's ruling was not based on a mere subjective hunch or predisposed disdain for the NYPD, but rather, eight years of stop-question-frisk data that indicated the majority of SQFs were primarily located in communities of color and involved Blacks and Latinos. Similar to prior research and Jeff Fagan's expert testimony, this dissertation sought to examine racial and ethnic disparities that may exist during SQF practices

amongst the NYPD. Instead of focusing on racial and ethnic disproportionality in the rate

of stops, however, this dissertation considered the events that transpire during SQFs,

specifically the prevalence and nature of use of force.

Using the minority threat hypothesis as a framework, along with prior research on

police use of force, several research questions were devised with an emphasis on racial

and ethnic disparities in police use of force. First, which factors predict use of force

across suspect, situational, departmental, and ecological levels of analysis? Given the

array of research findings from chapter 5, the first research question focuses on the effect

of race and ethnicity at the individual level. Second, after controlling for the appropriate

micro- and macro-level variables, do police officers use force more often in

predominately minority neighborhoods? Lastly, does an individual's race/ethnicity

interact with the racial/ethnic composition of a police precinct to produce disparities in

police use of force? Considering the results reported in chapter 5 and the far-reaching

consequences associated with police use of force, the following sections discuss the

theoretical, social, legal, and departmental implications of this research.

Theoretical Implications

Couched in the broader literature on the minority threat perspective, the primary

focus of this dissertation was to determine whether crime control efforts in the form of

police use of force varied by the racial/ethnic composition of precincts, and if so, whether

some were targeted more than others. Specifically, police officers may use race/ethnicity

as a way to describe, identify, and control a typical offender or offender population in

order to preserve the status quo for the political elite (Harris, 2002). The NYPD's use of

force in the context of SQFs, therefore, may be a mechanism through which the historical

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majority group in New York City (i.e., Whites) maintains their power and privilege over racial and ethnic minorities.

The current study framed and analyzed police use of force using the minority threat perspective. With regard to the second research question, the findings revealed that the minority threat perspective did not provide an explanatory framework for understanding police use of force *in general*. In other words, percent Black and percent Hispanic were not significant predictors for non-weapon or weapon force, as indicated in Tables 8 and 9. These findings suggest that the NYPD does not use force on the basis of a precinct's racial and ethnic composition when encountering *all* individuals during SQFs. The findings from the cross-level interaction, however, do offer partial support for the minority threat perspective and help answer the third research question. Whereas Black individuals were nominally less likely to have non-weapon force used against them in predominately Black precincts compared to Whites, Latinos were more likely to have non-weapon force and weapon force employed against them in primarily Latino precincts compared to their White counterparts. These findings indicate that the racial and ethnic composition of a precinct does matter but differently for Black and Hispanic individuals who were stopped. Put simply, the NYPD may use percent Black and percent Hispanic as an ecological cue to determine whether they should or should not use force against Blacks and Hispanics at the individual level.

Explaining the Null Findings

Given that percent Black and percent Hispanic did not predict police use of force, several questions must be answered with regard to the second research question. Specifically, why did the minority threat hypothesis fail to provide a general explanation of police use of force amongst individual's in New York City? There are a number of possible explanations. First, percent Black and percent Hispanic may have revealed null associations with police use of force simply because they do not matter. This interpretation is likely incorrect, however, given the statistically significant cross-level interaction between individual-level race/ethnicity and precinct-level racial/ethnic composition. Second, the unit of analysis for percent Black and percent Hispanic may be too large at the precinct level to detect a minority-threat effect. In short, the racial and ethnic makeup of a precinct may be driven by the concentration of ethnic minorities within smaller units of analysis. If there were a number of census tracts with a high concentration of Blacks and Latinos, for example, and they were aggregated to a larger unit of analysis, a minority-threat effect may be deflated at the precinct level. Furthermore, it is unlikely that police presence is uniform throughout a precinct. The NYPD likely deploys more resources to smaller geographic areas that are deemed problem places. Hence, a smaller unit of analysis such as street segment (Curman, Andresen, & Brantingham, 2014; Telep, Mitchell, & Weisburd, 2014; Weisburd, Groff, & Yang, 2012; Weisburd et al., 2006) or U.S. Census tract (Kane et al., 2013) may be more meaningful for identifying racial and ethnic disparities in police use of force, despite the emphasis placed on precincts in prior research (Kane, 2002; Kane, 2005).

Lastly, the negligible effects may be due to the operationalization of the minority threat perspective. Traditionally, prior research has operationalized minority by racial and

ethnic percentages (Holmes, 2000; Holmes et al., 2008; Jackson & Carroll, 1981; Jackson, 1985, 1986; Kane, 2002, 2005; but see Stults & Baumer, 2007). Considering that the minority threat perspective predicts that a growing minority population will incite fear in the majority group (resulting in increases in formal social control), it is important to account for the majority group's representation in the population of interest. As Kane and colleagues (2013) state, research should test "how racial/ethnic change relative to the initial white population size might behave as a threat trigger, as Blalock's (1967) model suggests" (p. 962). Although Kane and colleagues (2013) research relied on longitudinal data, similar measures that account for the majority's representation in the population could be constructed using cross-sectional data through ratios. An alternative operationalization of minority threat might be Black-to-White and Latino-to-White ratios (see Kane et al., 2013). Take, for instance, a precinct that is 40 percent Black. There is no way to discern whether 40 percent Black represents the minority or the majority. The racial/ethnic breakdown could be 40 percent Black, 40 percent Latino, and 20 percent White. Conversely, it could be 40 percent Black and 60 percent White. By constructing a ratio, the measures of minority threat would be relative to the White population.

Other Ecological Factors. Neither concentrated disadvantage nor violent crime rates predicted non-weapon or weapon force. These ecological factors may not be significant because of sample selection bias. As Winship and Mare (1992) state,

> Sample selection is a generic problem in social research that arises when an investigator does not observe a random sample of a population of interest. Specifically, when observations are selected so that they are not independent of the outcome variables in the study, this sample selection leads to biased inferences about social processes. (p. 328; see also Berk, 1983; Bushway, Johnson, & Slocum, 2007)

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In the current study, this means that the final sample only reflects the individuals who were stopped and had force used against them. Such an approach excludes cases in which a person was stopped but not documented on a UF-250 form, or had force used against him or her but was not documented. Because some individuals are not included as part of the final sample, variation in police use of force is lost. More importantly, as Zatz and Fagan (1985) state, "decisions at each of these selection points can affect later outcomes" (p. 105). In short, concentrated disadvantage and violent crime rate may have been insignificant because individuals comprising the final sample were qualitatively different from the full sample of people stopped by the NYPD. The final sample may have only represented the most suspicious people at the individual level, leaving ecological characteristics as weak predictors. Unfortunately, HLM does not have the capabilities to correct for sample selection bias.

Explaining the Significant Findings

The second major question of interest pertains to the disparate findings for Blacks and Latinos in terms of the third research question. Why were Black individuals nominally less likely to have non-weapon force used against them in predominately Black precincts compared to Whites, whereas Latinos were more likely to have non-weapon force and weapon force employed against them in primarily Latino precincts compared to their White counterparts? Although the finding for Black individuals runs contrary to the predictions proposed by the minority threat hypothesis, the benign neglect hypothesis may provide some insight into this outcome (Liska & Chamlin, 1984).

Benign neglect hypothesis. The benign neglect hypothesis suggests that as Blacks become more prominent in the population (e.g., precincts), a shift occurs in the

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racial composition of crimes. Specifically, "intraracial crimes become more prevalent and interracial crimes [become] less prevalent" (Ousey & Lee, 2008, p. 328). In other words, crimes that involve a Black perpetrator and a White victim are replaced by those that involve a Black perpetrator and a Black victim because the Black population is increasing in a certain area. With regard to the minority threat perspective, the Black population (i.e., the minority group) no longer poses a threat to the White population (i.e., the majority group). Furthermore, "the racial make-up of offenders and victims reduces the severity of criminal sanctions imposed on blacks because the state views crimes perpetrated against blacks as less deserving of official action" (Eitle et al., 2002, p. 560). Research supporting the benign neglect hypothesis indicates that higher percentages of Black individuals are associated with lower Black arrest rates (Chamlin & Liska, 1992; Liska & Chamlin, 1984; Parker et al., 2005). In line with this research, Blacks may be less likely to have non-weapon force used against them in predominantly Black precincts compared to Whites because they are viewed as an ecologically contained threat that does not pose a problem to the White majority (Kane, 2002): thus, there is no need for formal social control.

  Race out of place. The interpretation of the results also suggests that Whites were nominally more likely to have non-weapon force used against them compared to Blacks in predominately Black precincts. Although this finding runs contrary to the minority threat literature, research examining race and place may provide a basis for such results. As prior literature suggests, police officers develop conceptions of place and the people who occupy these areas (Bittner, 1970; Brown, 1981; Sherman, 1989), whereby a race-place nexus is created that defines the moral characters of those comprising certain

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localities (Klinger, 1997). Consequently, police officers expand their understanding of place to include jurisdictional notions of acceptable and unacceptable behavior for certain individuals. Because officers develop "typifications" of vehicles, persons, and spaces using their experience in conjunction with "commonsense geography" (Meehan & Ponder, 2002, p. 402), they may become suspicious of individuals who do not fit their race-place profiles. As Skolnick (1994) states, "knowledge of what is 'normal' and expected within a community is a key ingredient in the formation of police suspicion" (p. 44).

Research examining the race-out-of-place hypothesis documents that both Blacks and Whites may be differentially policed depending on the ecological context (Carroll & Gonzalez, 2014; Ingram, 2007; Novak & Chamlin, 2012; Petrocelli, Piquero & Smith, 2003; Renauer, 2012; Rojek, Rosenfeld, & Decker, 2012). Meehan and Ponder (2002), for instance, found that police officers' use of in-car computers to gather information about suspects (i.e., an electronic trail of officers' query behavior) varied according to race and place. Specifically, they found that surveillance of Black drivers significantly increased as they left predominately Black communities and entered White neighborhoods. Police officers, however, do not only formulate "out-of-place" biases with regard to Blacks. Research has similarly documented that the rate at which White drivers are stopped, searched, and cited increases as the percentage of Blacks increase in a police beat (Novak & Chamlin, 2008). In the same study, Black drivers had lower rates of being stopped, searched, and cited in predominately Black police beats. Carroll and Gonzalez (2014) also found that after the initial vehicle stop, police officers were more likely to frisk White and Black drivers if they were viewed "out-of-place." The disparity

in frisks was contingent upon the racial composition of an area, with Blacks being frisked more often in predominately White areas and Whites being frisked more often in predominately Black areas. Ultimately, as Meehan and Ponder (2002) conclude, "racial profiling is inextricable tied not only to race, but to officers' conceptions of place, of what *should* typically occur in an area and *who belongs* as well as *where they belong*" (p. 402). Returning to the findings in this dissertation, police officers may be more likely to use non-weapon force against White individuals in predominately Black precincts because they do not align with the cognitive schemas that officers develop regarding race and place.

Latinos: The "new" threat. The finding that Latinos were more likely to have non-weapon force and weapon force employed against them in primarily Latino precincts compared to their White counterparts parallels the expectation of the minority threat hypothesis and prior research. The fact that Latinos were significantly related to both forms of force may suggest that the majority group views Latinos as the "new threat." Census data and prior research help inform the new-threat persona of Latinos. According to Census data (2000), Latinos not only outnumber Blacks in the United States (Grieco & Cassidy, 2001), but by 2050, they will comprise 50 percent of the population (Frey, 1999), a figure that will eventually exceed Whites in the population. Moreover, public opinion polls indicate that Whites view Latino immigration as a primary social issue, which includes fear of immigrant crime (Cooper, 2000; Lane & Meeker, 2000). Fear of Latinos is not only limited to crime. A growing minority group may be perceived by the majority group as politically and economically threatening: "minority group size serves as an indicator of minority group power in which, in democratic society, larger relative

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numbers translate into greater social and political influence" (Johnson, Stewart, Pickett, & Gertz, 2011, p. 408).

Eitle and Taylor (2008) found that the Latino population was a significant contextual-level predictor of fear of crime whereas the Black population was not. Similarly, Kane (2002) found that increases in the Latino population predicted increases in police misconduct, a finding that did not hold true of increases in the Black population. As Kane (2002) suggests, these contrasting outcomes may be due to the changing racial/ethnic composition of New York City: "The census data for 1970, 1980, and 1990 showed that while the black population in New York City became highly concentrated into a smaller number of precincts…, the Latino population increased its overall representation across precincts over time" (p. 887). Recent estimates from the Department of City Planning (2010) indicate that the number of Latinos continues to grow in New York City. From 2000 through 2010, the Latino population has increased by eight percent or 175,522 individuals. In the context of census data and prior research, Latinos may be more likely to have both forms of force employed against them than White because they are viewed as the "up-and-coming" threat to the White majority's hegemony.

Implicit Bias. The differential treat of individuals on the basis of their race, ethnicity, and/or location may be the result of implicit bias. As social psychologists indicate, biases have changed over time from the explicit (e.g., racism) to the implicit, leading some to conclude that "modern prejudice is not your grandparents' prejudice" (Fiske, 2010, p. 8). Implicit bias refers to the stereotypes or attitudes that impact human cognition, action, and decisions in an unconscious manner. In other words, the activation

of such biases are without an individual's awareness and are "not consciously accessible through introspection" (Kang et al., 2012, p. 1132). The formation of implicit bias is multifaceted in nature. Although there is some research to suggest that genetics matter (Mahajan et al., 2011), most studies support the nurture argument when discussing implicit bias. Rudman (2004) indicates that early experiences with certain social groups and cultures may underlie implicit attitudes, along with the media (Dixon & Linz, 2000; Oliver, 2003; Weisbuch, Pauker, & Ambady, 2009). Each of these sources may expose individuals to direct and indirect messages about different social groups.

Implicit biases are so pervasive and robust that everyone is influenced by them. This is a particularly salient issue for police officers as they employ force on the basis of their perceived level of threat in an encounter. If police officers have implicit biases of certain social groups, it may cause them to view certain people as being a greater threat or more hostile. Research, for example, has documented that an implicit association exists between Blacks and aggression/crime (Correll et al., 2007a, 2007b; Eberhardt, et al., 2004; Peruche & Plant, 2006). Using a computer program, Correll and colleagues (2002) asked participants to either push the "shoot" button if the suspect was armed or push the "don't shoot" button if the suspect held something neutral. They found that participants were not only quicker to shoot the suspect if he was Black rather than White, but that the most common errors were shooting an unarmed Black man and not shooting an armed White man. To the extent that police officers have such implicit biases, there may be disparities in police use of force and SQFs. In fact, several teams of researchers have conducted studies on implicit bias using law enforcement personnel. Plant and Peruche (2005), Peruche and Plant (2006), and Correll et al. (2007a, 2007b) all

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implemented versions of shoot-don't shoot research and found evidence of race-based implicit biases in police officers.

In addition to race-based biases, police officers may also hold place-based implicit biases. As Lum (2011) states, "Place-based cues, especially those most noticeable to an officer (e.g., socioeconomic status, poverty, racial and ethnic makeup, disorder, crime, pedestrian and traffic density, and land use), may significantly affect an officer's worldview and thereby his or her discretion" (p. 632). Notions of place-based implicit biases are consistent with the process of ecological contamination, whereby individuals assume greater moral liability for living in "bad" neighborhoods (Werthman & Piliavin, 1967). In other words, stereotypes associated with particular neighborhoods become attached to the individuals that reside in them. Like race-based biases, place-based implicit biases may influence cognition, action, and decisions in an unconscious manner. Such race- and place-based implicit biases may be one explanation for why police officers were more likely to use non-weapon force against Blacks and Hispanics compared to Whites, along with accounting for variations in police use of force on the basis of ecological characteristics (e.g., the cross-level interaction between Hispanic at the individual level and percent Hispanic).

The Fair and Impartial Policing (FIP) program is currently one effort to alleviate implicit bias. Developed by Dr. Lorie Fridell, the FIP programs seeks to reduce and/or eliminate implicit bias through "(a) recruitment/hiring; (b) agency policy; (c) training; (d) leadership supervision and accountability; (e) assessing institutional practices and policies; (f) outreach to diverse communities; and (g) measurement" (Fair and Impartial Policing, 2015, para. 3). The comprehensive programs informs police officers of implicit

bias and helps them identify and undo or counteract implicit bias that make be influencing their behavioral responses. The training is provided to command-level personnel (i.e., command personnel and community leaders), recruits/patrol officers, first-line supervisors, law enforcement trainers, and Captains in mid-management positions. Although the FIP program is grounded in research in social psychology, the program has not been evaluated on various measures of effectiveness related to departmental reductions in implicit bias.

Social Implications

Over the past few decades, it has become apparent that traditional policing strategies predicated on the threat of arrest and punishment are not effective at controlling crime. Such strategies had a tendency to alienate police from the citizens they serve, which hindered public support for their efforts (Reiss, 1992; Moore, 1992). Considering the ineffective nature of traditional policing strategies and the lack of public support, police departments around the country shifted their crime control approach to mend "the relationship between the police and public while at the same time improving crime control" (Sunshine & Tyler, 2002, p. 521; see also President's Task Force on 21st Century Policing, 2015). Consequently, crime control became a shared goal between police and the community, whereby crime reduction depended on a strong relationship between the two (Friedman, 1992). In an effort to strengthen community-police relations, police departments' developed community oriented initiatives that increased police contact with citizens, such as implementing more foot patrols and holding police/community meetings (Skogan & Hartnett, 1997;).

Although community oriented policing is a widely adopted strategy among police departments, its effectiveness rests on resident support and the quality of police-citizen interactions—rather than the police contact alone (e.g., saturation strategies)—because it affects citizens' perceptions of police legitimacy (Carter & Radelet, 1999; Cordner, 1997; Goldstein, 1987; Greene & Pelfrey, 1997; Skogan, 1998; Williams, 1998). Research examining the impact of police-citizen encounters on legitimacy indicates that procedural justice or the manner in which police treat citizens is crucial to fighting crime. As Eck and Rosenbaum (1994) state, police-citizen cooperation and perceptions of legitimacy requires a "high level of trust between police and citizens" (p. 18). Furthermore, the President's Task Force on 21st Century Policing (2015) recently stated that "[t]rust between law enforcement agencies and the people they protect is essential in a democracy" (p.1). To foster trust and legitimacy, police officers must be impartial and consistent in their decisions, treat all people with dignity and respect, and act out of benevolence to engender trustworthiness within the community. By building a trustworthy relationship with the community and treating them fairly, a high level of legitimacy ensues whereby the police are able to effectively combat crime because citizens are more likely to comply during police encounters, obey the law, and cooperate as victims (Tyler, 1990, 2004).

Taking into consideration the centrality of procedural justice in determining levels of police legitimacy, the NYPD may be constraining their levels of legitimacy through racial and ethnic disparities in police use of force. Again, the results in chapter 5 indicated that (1) Blacks and Hispanics were more likely to have non-weapon force used against them than Whites, and (2) Hispanics were more likely to have non-weapon and

weapon force used against them if they lived in predominately Hispanic precincts. If the

NYPD continues to use force in a similar fashion, there may be short- and/or long-term

unintended negative consequences such as disintegrating police-community relations,

diminishing police legitimacy, and rioting (e.g. Ferguson Police Department). The

salience of such negative effects may be compounded in minority communities, where

police officers are viewed unfavorably due to adverse interactions. Recently, Weitzer and

Tuch (2006) found in their national survey that approximately 40 percent of Black

respondents claimed they were unfairly treated by the police compared to only 2 percent

of Whites. Moreover, only 22 percent of Blacks respondents were very satisfied with the

police whereas 50 percent of Whites indicated being very satisfied. Similar to recent

suggestions by Braga and Weisburd (2010), the manner in which the NYPD carries out

SQFs must done with an emphasis on procedural justice and concerns about police

legitimacy. Unfortunately, as Weisburd and colleagues (2014) state, "There is no

evidence that the NYPD has emphasized procedural justice and legitimacy evaluations"

(p. 147).

The progression of procedural justice and police legitimacy within the NYPD

may be best accomplished through policy and training. Police officers are often placed in

circumstances where legal factors are murky and overly broad protocols provide little

guidance on the streets (Hemmens & Levin, 2000; Roberts, 1999). In these situations

where vague protocols and/or policies lead to uncertainty, "police may turn to suspect

characteristics or the sociostructural environment for help in deciding the best course of

action" (Gau & Brunson, 2010, p. 258). The literature indicating that ambivalence is a

source of arbitrary decision making may provide an explanation for the individual-level

effects of race and ethnicity. Specifically, Blacks and Hispanics were significantly more likely to have non-weapon force used against them than Whites; these findings, however, were not true for weapon force. The disparities that exist in non-weapon-force circumstances may suggest that police officers are uncertain about a "right" way to proceed because these are the situations where departmental policy is unclear. Consequently, police officers may rely on nonbehavioral cues such as race and ethnicity to make a final decision about employing non-weapon force. Conversely, when officers employ weapon force, there are rigid guidelines that provide officers with a clear course of action. By implementing policies that help govern situations where police officers use non-weapon force, the NYPD may prevent racial and ethnic disparities that undermine procedural justice and police legitimacy through the equitable distribution of justice. Research supports the fact that policy is an effective solution (Fyfe, 1979, 1988; Gain, 1971; Geller & Scott, 1992; Walker, 1993; White, 2001). Coupled with in-house training, the policies should be effective at restraining decision making premised on an individual's race and/or ethnicity.

Police Commissioner Bratton has begun making a number of changes within the NYPD so that police officers can engage with community members on a more personal level and rebuild police-community relations. First, Bratton is changing the way rookies make their transition from the academy to the streets of New York City. Rather than immediately placing them on the street by themselves or with other rookie officers, Bratton is having rookies work in teams with veteran officers. These more experienced officers are supposed to provide rookies with wisdom and knowledge of not only their profession but also the community that they come into contact with on a daily basis

(Cullen, 2015). Second, Bratton is instating a new patrol model that reduces the number

of specialty units and increases the number of patrol officers. Returning to the beat-cop

paradigm, these officers will be assigned to smaller areas within precincts and expected

to communicate with the community in order to identify individuals who are causing

problems. Third, Bratton will give all police officers in the NYPD a smartphone, along

with equipping all patrol cars with tablets (e.g., iPads). His logical for these devices is

that they will free police officers from their radio calls and allow them to complete

paperwork in the field, both of which will increase involvement with the communities

they patrol. Together, Bratton believes that these changes will incite positive police-

community relations and reduce the NYPD's over reliance on SQFs. Although there has

not been an assessment of these new changes yet, the reliance on SQFs has decreased

from 700,000 in 2011 to 45,000 in 2014.

Legal Implications

The results in chapter 5 reinforce the ruling of the Federal District Court judge

that the NYPD was targeting Black and Latino New Yorkers. Indeed, the results

presented in chapter 5 indicate that (1) Blacks and Hispanics were more likely to have

non-weapon force used against them than Whites, and (2) Hispanics were more likely to

have non-weapon and weapon force used against them if they lived in predominately

Hispanic precincts. These findings indicate that the NYPD may be engaging in racially

and ethnically bias policing practices when using force during SQFs. Such disparities are

in clear violation of the Fourth and Fourteenth Amendments of the U.S. Constitution.

These findings also bring into question whether *Terry v. Ohio* and other U.S. Supreme

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Court cases in its progeny (e.g., *Sibron v. New York*, 1968) may have underestimated

whether the benefits of the SQF offset the potential costs.

In *Dunaway v. New York* (1979), the U.S. Supreme Court explained its view of

what *Terry* had accomplished in legal terms:

> *Terry* for the first time recognized an exception to the requirement that Fourth
> Amendment seizures of persons must be based on probable cause. . . . *Terry*
> departed from traditional Fourth Amendment analysis in two respects. First, it
> defined a special category of Fourth Amendment "seizures" so substantially less
> intrusive than arrests that the general rule requiring probable cause to make
> Fourth Amendment "seizures" reasonable could be replaced by a balancing test.
> Second, the application of this balancing test led the Court to approve this
> narrowly defined less intrusive seizure on grounds less rigorous than probable
> cause, but only for the purpose of a pat-down for weapons. (*Dunaway*, 1979, pp.
> 208–210)

Consequently, *Terry*'s legal impact expanded law enforcement authority to engage in

stop, question, and frisk practices on less then probable cause. And cases decided since

Terry have expanded the range of police actions that may be taken based on the

reasonable suspicion standard. For example, the Court has upheld "protective sweeps" of

houses based on reasonable suspicion "that the area to be swept harbored an individual

posing a danger to the officer or others." (*Maryland v. Buie*, 1990, p. 327; see also

Messing, 2010).

The impact of *Terry* in practical terms is more debatable. On one hand, the

constitutional authority for police to engage in SQF has been credited for contributing to

the significant reductions of violent crime in the United States since the early 1990s

(Blumstein & Wallman, 2006; Rosenthal, 2010; cf. Fagan, Davis, & Holland, 2006;

Johnson, Golub, & Dunlap, 2006; Kelling & Souza, 2001; but see, for an alternative

explanation, Harcourt & Ludwig, 2006). On the other hand, abundant evidence

demonstrates that police use SQF against racial and ethnic minorities at much higher

rates than they do against Whites (see Gelman, Fagan, & Kiss 2007; Goel, Rao, & Shroff,

Harris, 2015; Thompson, 1999). Many scholars posit that *Terry*'s reasonable suspicion

standard invites racial profiling (see, e.g., Alexander, 2010; Capers, 2011; Katz, 2004).

Indeed, data suggest that "[m]inority group members can be not only stopped, but

subjected to a frisk without any evidence that they are armed or dangerous, just because .

. . [of] the neighborhoods in which they work or live" (Harris, 1994b, p. 44; see also

Tonry, 2011). The results presenting in chapter 5 of this dissertation support the position

taken by these scholars that stop-question-frisk practices may be motivated, in large part,

on the basis of racial profiling. This finding is troubling, especially in light of the U.S.

Supreme Court's decision in *Whren v. United States* (1996).

      Whren held that pretextual stops were not unconstitutional; so long as a stop is

supported by a legitimate reason, no matter how minor—such failure to signal, driving

with a nonfunctioning taillight, exceeding the speed limit by a mile or two per hour, and

so on—then the stop is permissible under the Fourth Amendment. But it is commonplace

for police to pull-over a car for a routine traffic offense "as a pretext for investigating

other crimes, particularly drug offenses … and Blacks and Hispanics are

disproportionately targeted by the practice" (McAffee, 2012, p. 618; see also Cole, 1999).

Thus, *Whren* has eroded *Terry* by allowing police to stop and question people without

reasonable suspicion for a particular criminal offense, but rather for any pretextual

reasons. In other words, under *Whren*, the fact that police may have used such a minor

infraction as a means of investigating other criminal activity for which a stop would not

have been authorized (on account of a want of reasonable suspicion) is simply irrelevant.

The Court in *Whren* rejected the notion that racial profiling might underlie a pretextual stop as being of consequence to the law of search and seizure. "[T]he constitutional basis for objecting to intentionally discriminatory application of laws is the Equal Protection Clause, not the Fourth Amendment. Subjective intentions play no role in ordinary . . . Fourth Amendment analysis." (p. 813; see also *Arkansas v. Sullivan*, 2001). Thus,

> *Whren* creates a reality in which it is possible to separate a police officer's racial bias from his or her observations and account of alleged criminality, thereby making it possible for the reviewing judge at a suppression hearing to uphold the officer's actions as resting upon neutral facts untainted by racial bias. (Thompson, 1999, p. 982).

But the assumptions in *Whren* do not appear to be empirically supported. Police officers likely use the race and ethnicity as part of their frameworks for assessing suspicion and danger, even if unconsciously (see Eberhardt, Goff, Purdie, & Davies, 2004). Consider, for example, that social disadvantage and "high-crime areas" are perceptually and statistically associated with ethnic minorities (Alpert et al., 2005; Fagan, 2008; Ferguson & Bernache, 2008; Loury, 2002). This, in turn, may lead police to have elevated levels of suspiciousness in minority neighborhoods (Fagan et al., 2010). To the extent that the police have elevated levels of suspicion in these neighborhoods, it may exacerbate and reinforce racial/ethnic inequalities in the practice of law enforcement, or as the minority threat perspective highlights, the subjugation of ethnic minorities (cf., e.g., Brandl, Chamlin, & Frank, 1995; Chamlin, 1990; Greenberg et al., 1985; Kane, 2002; Liska, Lawrence, & Benson, 1981; Nalla, Lynch, & Leiber, 1997).

Quillan and Pager (2001) found that the prevalence of young Black men affected urban residents' perceptions of crime in their neighborhood, even after controlling for

neighborhood characteristics and crime rates. Extrapolating on Quillan and Pager's (2001) research, police may have distorted perceptions of ethnic minorities in neighborhoods where they are heavily concentrated. Consequently, police officers likely develop a perceptual shorthand that associates certain races and ethnicities with specific kinds of people that are perceived as "symbolic assailants" (Skolnick, 1966; see also Hunt, 1985; Kappeler, et al., 1998; Van Maanen, 1978). Such a framework can contribute to racial and ethnic disparities in police use of force because these symbolic assailants are viewed as the enemy (Skolnick & Fyfe, 1993; Van Maanen, 1978).

Although the ruling in *Terry v. Ohio* (1968) gives police officers the ability to perform brief, investigatory stops and if needed frisks, it does not give the NYPD the right to use race and ethnicity as a proxy for reasonable, articulable suspicion during SQFs. The ruling in *Terry*, however, invites the potential for racial and ethnic biases to permeate stop and frisk practices and any subsequent use of force outcomes. For that reason, steps should be taken to require a higher constitutional standard, such as probable cause, when police officers conduct a SQF. As Justice Douglas dissented in *Terry v. Ohio* (1968),

> The infringement on personal liberty of any "seizure" of a person can only be "reasonable" under the Fourth Amendment if we require the police to possess "probable cause" before they seize him. Only that line draws a meaningful distinction between an officer's mere inkling and the presence of facts within the officer's personal knowledge which would convince a reasonable man that the person seized has committed, is committing, or is about to commit a particular crime… To give the police greater power [(i.e., reasonable suspicion to conduct a SQF)] than a magistrate is to take a long step down the totalitarian path. (*Terry v. Ohio*, 1968, p. 39)

A more restrictive constitutional standard (i.e., something closer to probable cause) may

reduce an officer's implicit and explicit biases through limiting their actions on the basis

of "mere inklings."

Another important finding of the present study concerns the potential need for

improved police training with regard to *Terry*'s standard for conducting frisks. *Terry* was

clear when a frisk is permissible:

> When an officer is justified in believing that the individual whose suspicious
> behavior he is investigating at close range is armed and presently dangerous to the
> officer or to others, it would appear to be clearly unreasonable to deny the officer
> the power to take necessary measures to determine whether the person is, in fact,
> carrying a weapon and to neutralize the threat of physical harm. (*Terry v. Ohio*,
> 1968, pp. 23-4)

Yet, police officers indicated that they frisked individual for noncompliance with a

directive. Furthermore, individuals that were frisked for noncompliance had greater log

odds of having both non-weapon and weapon force used against them. Specifically,

individuals that were frisked for noncompliance had 1.160 higher log odds for non-

weapon force and 2.357 higher log odds for weapon force in comparison to their

counterparts. The results with regard to this particular finding suggest that two distinct

constitutional violations are at issue in the New York City SQF cases analyzed in this

dissertation. The first violation was addressed in *Floyd*, concerning the lack of reasonable

suspicion for stops tinged by racially-motivated factors. But after the initial stops occur,

it appears a second constitutional violation occurs. The Fourth Amendment, as

interpreted in *Terry*, bars a pat-down without reasonable suspicion that a suspect is armed

and potentially dangerous. But in approximately 8% or 41,453 of the cases, police

reported on the UF-250 forms that the reason they conducted a frisk was noncompliance

with a directive. But noncompliance with a directive is not a legally-sanctioned reason for frisking a suspect.

Departmental Implications

The use of stop and frisk tactics in New York City has been a crime-fighting centerpiece for the NYPD since the mid-1990s. Despite the recent ruling in *Floyd v. City of New York* (2008), it is unlikely that the NYPD will discontinue the use of SQFs. Police Commissioner Bratton has even stated that "any police department in America that tries to function without some form of 'stop-question-frisk,' or whatever the terminology they use, is doomed to failure. It's that simple" (as quoted in Harris, 2014, p. 863). Given that the NYPD will continue to exercise their right to employ SQFs on the streets of New York City, they must move forward in a manner that promotes democratic policing. As Hickman (2010) succinctly states, democratic policing is premised upon "the fundamental expectation of equal treatment under law regardless of one's race or ethnicity, gender, religion, sexual orientation, or other extralegal factors" (p. 489). Such expectations should not be taken lightly by the NYPD as they are the largest police departments in the United States and often serve as a paragon for other police departments across the country and world. To ensure the equitable treatment of all New Yorkers in the context of SQFs and reduce disparities related to police use of force, the NYPD must proactively maintain its adherence to the concept of democratic policing through accountability, transparency, and fairness.

Discussion about democratic policing revolves around the principles of accountability, transparency, and fairness. The degree to which a department is accountable is not measured by its effectiveness as a crime control agent but rather its

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ability to adhere to the rule of law. Under the principle of accountability, there is an emphasis on legally prescribed means of accomplishing an objective, whereby "Dirty Harry" means are never a justifiable solution (Klockars, 1980). Moreover, while police officers follow a chain of command and report to their police chief, they must be accountable to the public, identifying any kind of police behavior that is perceived as a transgression against the public and then, correcting the problem (Hickman, 2010).

The second principle that encourages democratic policing is transparency, or the notion that police activities should be open to public scrutiny. The focus on transparency does not mean that every aspect of police operations should be made public. Clearly, the police must maintain some level of secrecy in order to effectively combat the criminal population, and/or preserve the integrity of a criminal case from a story-hungry media frenzy. If such secrecy is irrelevant to the goals of the police, however, there are added benefits for police departments to be transparent. In line with the idea that "the police are the people and the people are the police" (National Advisory Commission, 1973, p. 330), transparency promotes a higher level of mutual trust between the police and the public because the public is more aware of police affairs. Furthermore, having police information open to the public creates a social control mechanism that will deter illegal or immoral activities of officers, such as the disparate treatment of individuals on the basis of their race and/or ethnicity.

The last principle of democratic policing is fairness, which is directly related to equality of justice. As Hickman (2010) states, "In its broadest sense, fairness refers to the protection of basic human rights, but as one starts to focus the concept, the discussion turns to ideas about nondiscrimination, nonpartisanship, and equal treatment" (p. 491).

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Hickman's definition of fairness aligns well with Tyler's (1990) notion of police legitimacy. The extent to which the public views the police as a legitimate law enforcement agency depends on whether they are treated with dignity, politeness, and respect (i.e., procedural justice). Such treatment can only be accomplished when police officers are objective, unbiased, and consistent in their application of law. Without fairness in justice, democratic policing ceases to exist.

Internal Control Mechanisms: Promoting Democratic Policing

The prevention of racial and ethnic disparities in police use of force among the NYPD rests on the promotion of democratic policing. The principles of democratic policing must be maintained to mitigate the possibility that the NYPD continues to use force against citizens on the basis of their race or ethnicity. Such actions are (1) a violation the Fourth and Fourteenth Amendments of the U.S. Constitution, (2) considered a form of police misconduct, and (3) costly to the police department in multiple ways, such as "civil litigation and large monetary settlements, poor police-community relations, criminal prosecutions for civil rights violations, and federal interventions" (White, 2010, p. 469). Given the wide range of negative effects associated with racially and ethnically biased policing, the NYPD has a social, moral, and fiscal imperative to be accountable for the actions of their officers, thereby allowing democratic policing and police-community relations to flourish. Considering that the results indicate that the NYPD is using force in a racially and ethnically discriminatory manner, it is unlikely that democratic policing and police-community relations are progressing in New York City. For that reason, the NYPD must implement a number of changes at the departmental level to transform not only how police officers view racial and ethnic minorities, but also

how they interact with them in the context of SQFs. Below is a comprehensive accountability package that the NYPD may employ to combat racially and ethnically biased policing practices in the form of force.

Recruitment. One of the first points of contact with any new police officers is the recruitment stage. At the recruitment stage, police departments have the ability screen out racially and ethnically biased officers, although it is not always possible to detect such prejudices as most police cadets are on their best behavior. Ineffective screening of new hires may result in subsequent police misconduct cases, such as racial and ethnic disparities in police use of force. From 1980 to 1984, for example, a hiring process in New York City resulted in the employment of 12,000 new police officers. Due to the influx of so many police officers, the NYPD was unable to complete thorough and complete background checks on many officers, which would eventually resulted in numerous misconduct scandals. That being said, the NYPD must thoroughly screen individuals during the recruitment stage to eliminate those with prejudicial attitudes and discriminatory past behaviors (White, 2010).

Similar to many employers, police departments seek out individuals that they believe will be a "good fit" within their department. Considering that there are a number of general and specific qualifications that police departments look for when identifying the right candidate, the NYPD must employ a recruitment strategy that reaches a large applicant pool so that the department can be more selective in their hiring decisions. Theoretically, such hiring processes should weed out not only incompetent candidates but also those who hold racial and ethnic prejudices. There are a number of recruitment strategies to reach a large and diverse applicant pool. First, the NYPD could reach a

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larger audience of potential candidates by sending recruiters to high school and college career days, posting job opportunities on major online employment websites, and contacting criminology and criminal justice departments to name a few methods.

Second, the NYPD may want to increase efforts to attract more minority and female applications. As White (2010) indicates, diversity in police departments can "improve police-community relations, diffuse racial tension, and may even reduce the likelihood of police misconduct" (p. 470). Similar recommendations for diversity are also advocated by the Commission on Accreditation for Law Enforcement Agencies (CALEA). The NYPD, in fact, is almost as racially and ethnically diverse as New York City. The racial and ethnic breakdown of the NYPD is 54 percent White, 16 percent Black, 24 percent Hispanic, and 4 percent Asian, whereas the city's racial and ethnic composition is 33 percent White, 23 percent Black, 28 percent Hispanic, and 13 percent Asian (Cohen & Fredericks, 2014). Although the NYPD is quite diverse in terms of race and ethnicity, it does need improvement in its representation of female police officers. According to the *Workforce Profile Report* (2013) of New York City, female officers only comprised 34 percent of the NYPD taskforce, whereas they comprise 52 percent of New York City. Ultimately, a representative police department may be more understanding and empathetic of the community.

Lastly, the way in which the NYPD solicits for applicants should be done in a manner that communicates the advantages of being a police officer while portraying an accurate and realistic picture of real police work. Similar to various branches of the military that aggrandize their service to the U.S., police recruits often emphasize and exaggerate the excitement and danger of being a police officer. Despite the focus on

policing folklore that revolves around excitement and danger, most police work contains neither of these two characteristics. Consequently, when there exists a disjunction between expectations and the realization that real police work involves downtime and paperwork, there may be greater turnover, poorer job performance, and a higher likelihood that they engage in misconduct such as racially and ethnically biased actions (Skolnick & Fyfe, 1993; White, 2010). Furthermore, if recruiters promulgate the exciting and dangerous aspects of being a police officer, it may influence how new police officers conduct themselves. As Muir (1977) highlighted in his qualitative typology study, the degree to which police officers believed using high levels of coercion was acceptable was associated with the concomitance to their role as an "enforcers" or crime-fighters. Supporting Muir's (1977) observation, Terrill et al. (2003) found that police coercion is the result of differences in police officer attitudes. Specifically, officers that embraced the traditional police culture (i.e., the crime-fighter mentality) were more likely to use coercion than those with nontraditional cultural attitudes. In short, the NYPD must give potential candidates a realistic account of police work to avoid increases in employment turnover, poor job performance, and forms of misconduct related to racially and ethnically biased policing, which may include disparities in police use of force.

      Selection and training. Once there is a sizeable applicant pool, the police department must make sure that the potential candidates meet basic employment requirements, including minimum age, U.S. citizenship status, and at least a high school degree. If the applicant meets these basic criterions, they are given a physical agility test, written exam, oral interview, medical exam, and psychological exam. During the screening phase, police departments also conduct a thorough background investigation

that may include a criminal history check and interviews with family members, neighbors, and previous employers. This is an opportune moment for departments to elicit information that may help them screen out candidates that hold racially and ethnically prejudicial attitudes that may manifest itself as discrimination on the job. By conducting such an extensive background check, police departments increase their probability of selecting a candidate with the fundamental qualities of an ideal police officer. Because the screening-out process is not 100 percent effective at identifying unsuitable candidates for the police profession (Grant & Grant, 1995; Kane & White, 2009; Mollen Commission, 1994), police departments may want to couple the screening-out process with a screening-in process. The idea being that potential candidates should be identified during the application process on the basis of characteristics believed to best exemplify the ideal police officer. The NYPD should strive to screen in candidates with the following attributes: "an ability to demonstrate good judgment, maintain an even temperament, respect and appreciate diversity, show creativity and problem-solving skills, think on one's feet, handle pressure, and show leadership skills" (White, 2010, p. 471). The summation of these characteristics will be candidates that pose minimal risk to the community and strive for excellence in terms of police-community relations. Moreover, potential candidates possessing the attributes of respect and appreciation for diversity will undoubtedly treat the individuals they encounter in the context of SQFs with fairness and dignity regardless of their race or ethnicity.

After candidates are selected from the applicant pool and pass their background checks, they enter the police academy and then are assigned to a veteran officer for field training. While going through the police academy, cadets must receive the message that

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racially and ethnically biased policing is illegal, a form of misconduct, and will not be tolerated within the department. The way in which the NYPD conveys it's intolerance for prejudicial attitudes, discrimination, and bigotry must be facilitated through the convergence of traditional lecture-based instruction with scenario-based training (Bayley & Bittner, 1984; Birzer, 2003). In the classroom, the instructor must define discrimination and identify various forms of it, demonstrate its negative effects on police-community relations, and illustrate how it dismantles police legitimacy and reduces the effectiveness of the police, which are all associated with social, political, and fiscal costs. Such class-based instruction must be met with real world scenario-based training. For the NYPD, this means that scenario-based training must include a variety of SQF situations that force cadets to apply their classroom knowledge and expose them near real world challenges they may face in the field. Furthermore, such training exercises could also integrate New York City community members. These individuals could discuss their experiences interacting with the NYPD, which may include SQF encounters, to give cadets a well-rounded perspective of policing from the viewpoint of community members. Importantly, Black and Latino New Yorkers should participate in such training exercises to discuss their experiences with the NYPD, especially if it involved racially and ethnically biased policing practices. As a result, this training may help prevent officers from developing the "us-verse-them" mentality, whereby Blacks and Latinos are viewed as the enemy and more deserving of police use of force.

The police academy could also serve as the first point in which the NYPD identifies racial and ethnic animus amongst it cadets. Similar to "integrity tests," instructors would create scenarios that engage cadets in a manner that subtly tries to

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evoke discriminatory responses and/or behaviors. If discrimination is the response, the instructor must address such behavior, making sure that he or she knows that it is unacceptable. Such a program could also be mechanism for screening-in and/or screening-out cadets. A successful scenario-based program, however, must be carefully constructed to avoid discrimination entrapment, whereby junior officers feel it is necessary to engage in discrimination because their job depends on it. Regardless, such a program would produce police officers with a high sense of moral integrity, and it may serve as the earliest form of an early warning system in terms of racially and ethnically biased police officers.

Following their successful matriculation through the police academy, junior officers are typically assigned to a veteran officer for a period of field training. It is during this phase of training that junior officers are often exposed to sayings such as "forget everything you learned at the academy, now you'll find out how police work is really done" (Perez, 2010, p. 238). Such colloquial sayings are meant to impress upon junior officers that a major gap exists between the academy (i.e., theory) and practice (i.e., field work). The responsibility of field training officers (FTO), therefore, is to "bridge the gap between the classroom environment of the academy and the 'real world' of policing on the street" (White, 2010, p. 471). Thus, the NYPD must judiciously select FTOs from the highest echelon to ensure that these individuals contain the characteristics and integrity of an ideal officer. Importantly, these FTOs must also be able to impart the directive that racially and ethnically biased policing will not be tolerated, through both their words and their actions. Without FTOs of the highest caliber, the NYPD may be

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training officers to engage in racially and/or ethnically biased policing strategies that profile certain individuals.

Supervision. A police officer's job is not only slow at times, but it comes with a tremendous amount of solitude and autonomy. In some localities, especially rural areas, it is common for police officers to have limited contact with their supervisor. Despite the independence many officers are granted on the job, supervision plays an essential role in maintaining officer accountability (Walker & Katz, 2013). In fact, one study found that approximately 90 percent of police officers believed that competent supervisors prevented misconduct (Weisburd et al., 2000). For police officers working a beat or a particular area, frontline supervision usually comes from their sergeant. In short, sergeants are responsible for the individuals they directly supervise and must keep them accountable for their behaviors through disciplinary action. Likewise, the nexus between chain of command and accountability must pervade all hierarchical levels of a police organization (e.g., lieutenants are responsible for sergeants; captains are responsible for lieutenants; etc.). Overall, effective supervision is one solution to prevent and/or combat racially and ethnically biased policing in the NYPD.

Considering the robustness of police supervision, the NYPD should take steps to maximize the effectiveness of individuals in supervisory roles. First, sergeants who have an unmanageable "span of control" may find that racially and ethnically biased policing is more pervasive amongst their officers. Given that the NYPD is the largest police department in the world and relies on its line officers to carry out SQFs, it is likely that some sergeants may find it difficult to oversee all of their subordinates, which may lead to disparities in how line officers use force. By restricting the number of police officers

managed by a sergeant, therefore, the NYPD may reduce the racial and ethnic disparities that exist both in the initial SQF and the likelihood that police officers use force. Research has found that the optimal number of subordinates is eight to twelve for a sergeant (Walker & Katz, 2013).

Second, NYPD sergeants should not only punish or discipline their officers, but also reward first-rate policing through incentives (Kappler et al., 1998). The differential reinforcement of police behaviors will help foster a police culture that is devoid of various forms of prejudicial attitudes and discrimination. In terms of SQF and police use of force, incentives should be devised to encourage police officers to identify colleagues that may be engaging in racial or ethnic profiling. Third, it is imperative that NYPD sergeants receive adequate training of their duties and responsibilities. If not, sergeants may condone various behaviors because they are ill equipped to devise appropriate solutions. Fourth, NYPD sergeants should not be responsible for supervising peers in which they use to share equal rank. It may be difficult to supervise such peers because "officers do not respect their authority, they resent that the sergeant got the promotion and they did not, or because the officers may be aware of the sergeant's own past misdeeds" (White, 2010, p. 473; see also Skolnick & Fyfe, 1993). For that reason, the NYPD may want to relocate sergeants within a department so that their subordinates take them seriously and respect their orders.

The last crux underlying effective supervision is a police chief that is committed to accountability. As Skolnick and Fyfe (1993) highlight, police department reflect the philosophy or tone set by the police chief. The actions and/or inactions of a police chief may operate to reinforce racially and ethnically biased policing strategies and undermine

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administrative policies meant to curb such behaviors. Examples from Darryl Gates in Los Angeles, Frank Rizzo in Philadelphia, and Harold Breier in Milwaukee all illustrate the far-reaching consequences of a police chief's philosophy (Skolnick and Fyfe, 1993). In the NYPD, racial and ethnic disparities in SQFs and police use of force may have been the result of Mayor Michael Bloomberg's and Commissioner Ray Kelly's unquestioning support of SQF practices.

The role of former Police Chief Murphy exemplifies how effective supervision can positively change philosophical tones set in police department. While the NYPD police chief, Murphy instituted a system that held supervisors and administrators accountable for the conduct of their personnel. Those who identified crooked or corrupt cops were rewarded, whereas police officers that kept silent about their peers engaging in misconduct were punished. Moreover, Murphy made it his objective to replace incompetent police officers above the rank of captain with promising young commanders. The environment engineered by Murphy was one that vehemently ostracized those who engaged in or tolerated police misconduct (Skolnick & Fyfe, 1993). Similar provisions should be taken in NYPD to eliminate any racially and ethnically biased perceptions that may exist among officers.

Formal guidelines. Although police officers are granted a tremendous amount of freedom to carry out their occupational mandate, research suggests that police behavior is influenced by formal/administrative guidelines (Fyfe, 1979; (Fyfe, 1988; Gain, 1971; Geller & Scott, 1992; Walker 1993; White, 2001). The implementation of administrative guidance in the form of policies, rules, and procedures serves to provide police officers with a framework for making better decisions, especially when presented with

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uncertainties (Kappler et al., 1998). The NYPD should make several administrative changes to reduce racial and ethnic disparities involving SQFs. First, departmental policy must be more restrictive about the kinds of suspicious behaviors that govern SQFs. Administrative policy should require officers to undergo yearly training to bring them up-to-date with the legal precedence dictating *Terry* stops. Without mandatory training, the NYPD may maintain it's over reliance on SQFs, resulting in stops that are not justifiable under the Fourth Amendment. As Fagan (2012) found with regard to the NYPD, "[n]early 150,000, or 6.71% of all discretionary stops lack legal justification. An additional 544,252, or 24.37% of all discretionary stops lack sufficiently detailed documentation to assess their legality" (pp. 3-4). Considering that frisks and arrests in the context of SQF are positively associated with non-weapon and weapon force, and Blacks and Latino are more likely to be frisked and arrested, the NYPD must restrict their *Terry* stops to those incidents where uncertainty does not exist in the initial reasonable, articulable suspicion of a suspect.

Second, the NYPD should develop a clear and direct policy that forbids officers from using race and ethnicity as a precursor for initiating a SQF or using force. Fridell and colleagues' (2001) model policy should serve as a starting point for the NYPD.

> Officers may take into account the reported race or ethnicity of a specific suspect or suspects based on trustworthy, locally relevant information that links a person or persons of a specific race/ethnicity to a particular unlawful incident(s). Race/ethnicity can never be used as the sole basis for probable cause or reasonable suspicion. (p. 52).

Additionally, the NYPD must enforce this policy through leadership, disciplinary actions, and incentives. If successfully implemented, such policy will likely reduce racial and ethnic disparities in SQF practices and police use of force among the NYPD.

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Early warning systems. The first Early Warning (EW) systems were first

implemented by the Miami and Miami-Dade police departments in the late 1970s

(Walker & Alpert, 2002). Eventually, they were endorsed by the United States

Commission on Civil Rights in 1981 and then by the U.S. Justice Department during a

conference on police integrity in 1996 (Walker, Alpert, & Kenney, 2000). The reason for

having EW systems is to identify problem police officers on the basis of past behavior in

an effort to mitigate the possibility that bad behavior intensifies into a form of

misconduct. By collecting and analyzing data on problem behaviors (e.g.,

discrimination), EW systems are able to identify officers who pose greater risks to the

department and the community. Although EW systems are not overly prevalent in police

departments, their utility is becoming more common. In fact, by 1999, approximately

27% of police departments serving populations over fifty thousand people had an EW

system, with other departments in the planning phase (Walker et al., 2000).

EW systems are premised on the notion that a small portion of police officers

produce the majority of a department's complaints about problem behavior. Such cases

have been documented throughout the United States (U.S. Commission on Civil Rights,

1981; Toch et al., 1975). In most of the documented incidents of misconduct, there was a

trend of bad behavior for certain officers. The problem, however, was that "police

managers ignored patterns of repeated involvement in critical incidents and failed to take

any kind of supervisory attention to the officers with the worst records" (Walker et al.,

2000, p. 201). EW systems circumvent this ineptitude by documenting all incidents

related to an officer's bad behavior.

Most EW systems are comprised of three components: the selection criteria, the intervention, and the post-intervention monitoring (Walker & Alpert, 2002; White, 2010). Although the selection criteria may vary by police department, these are the indicators or "red flags" deemed to place an officer as being "at risk" (e.g., citizen complaints, use-of-force incidents, etc.). If an officer is selected as a risk on the basis of multiple "red flags," it becomes the department's obligation to address the issue. Many police departments initiate the process with an informal meeting between the officer and his or her supervisor. As Walker and Archbold (2014) note, the review and intervention process should be conducted by "a commander or committee of supervisors [rather] than an officer's immediate supervisor" (p. 71). Subsequently, if it is deemed necessary, there may be a formal intervention such as training and/or counseling (rather than punishment) to change the officer's behavior (Walker & Alpert, 2002). Finally, the department engages in post-intervention monitoring of the at-risk officer in order to make sure that problem behaviors are no longer an occurring.

Considering the ruling of the Federal District Court judge and the findings reported in chapter 5, the NYPD may want to implement an EW system in order to identify officers who are not only excessively stopping Black and Latino New Yorkers, but also using force against them at a disparate rate compared to Whites. Although EW systems are expensive, complex, and difficult to maintain, they can be instrumental in the reduction of citizen complaints, use of force, and other problem behavior. The Pittsburgh Police Department, for example, has an EW system in place that reviews officers on a quarterly basis. The system searches for accounts of racial bias and then produces an activity report. With this data, the department is able to identify at-risk officers and

intervene if necessary. The Vera Institute (2002) concluded that "the early warning system is the centerpiece of the [Pittsburgh] Police Bureau's reforms in response to the consent decree" (p. 37). The NYPD may have similar success with an EW system.

Internal affairs. Even with the aforementioned internal control mechanisms, there is still the possibility that the NYPD continues engaging in racially and ethnically biased forms of policing. In such circumstances, it remains the responsibility of Internal Affairs to conduct an investigation based on information that may have come from a citizen complaint, official report, or another police officer. Despite the traditional reactive nature of Internal Affairs, some police departments are using more proactive approaches to identifying problem officers. For example, "integrity tests" are becoming more common amongst police departments as a tool for pinpointing misconduct-prone police officers. These tests are designed such that there are ample opportunities for police officers to potentially succumb to misconduct. Unbeknownst to the officer under investigation, however, is that he or she is simultaneously being monitored for their response by Internal Affairs (Walker & Katz, 2013; White, 2010). In an effort to amplify the benefits of "integrity tests," police departments should consider using them on police officers deemed problematic by early warning systems.

The efficacy of Internal Affairs to investigate allegations of racially and/or ethnically biased forms of policing is contingent upon a number of factors. First, Internal Affairs must have complete support from the police chief (Walker & Katz, 2013). Without the support of the police chief, there is a clear message sent to officers in the department that such allegations of misconduct are insignificant. Furthermore, police chiefs should also demonstrate their support for Internal Affairs by communicating

directly with the investigative unit (Kappler et al., 1998). Second, Internal Affairs must

be given adequate resources and be properly trained. The number of officers comprising

an Internal Affairs unit should be relative to the size of the department. Although there is

not a definitive answer for an optimal investigator-to-officer ratio, former police

commission Patrick Murphy had some success within the NYPD when the ratio was

reduce from 1:533 to 1:64 (Sherman, 1974). Third, police leadership must engender a

departmental culture whereby working in Internal Affairs is viewed as a prestigious

position rather than a badge of betrayal (Klockars et al., 2000). Lastly, police departments

must have rigorous selection criteria for officers in the Internal Affairs unit. These

officers should have few, if any, problems in their past to ensure they have integrity in

their work and are not view as hypocrites by their fellow officers.

External Auditors. According to Walker and Archbold (2014), external auditors

are the most promising mechanism for reform and police accountability. The model they

propose involves a team of individuals constructed by local or state law. Of these

individuals, at least one of them is an expert in law and/or policing. They serve in a range

of functions, auditing complaints, policies, and police-community outreach programs.

Walker and Archbold (2014) believe that external auditors will foster organizational

change because they contain two special characteristics:

> First, as full-time government officials they have the authority to probe deeply
> into departmental policies and procedures with an eye toward correcting them and
> reducing future misconduct…Second, as permanent agencies they can follow up
> on issues and determine whether or not prior recommendations for change have
> been implemented. (p. 179)

The effectiveness of such external policing auditors is demonstrated by a number of

agencies, including the San Jose Independent Police Auditor, the Denver Office of the

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Independent Monitor, the Special Counsel to the Los Angeles Sheriff's Department, and the Boise Ombudsman.

In New York City, strides are being made to include external auditors as a way to keep the NYPD accountable for their actions. The Civilian Complaint Review Board (CCRB) reviews and investigates citizen complaints against NYPD officers. The CCRB, for example, has made a number of recommendations to the NYPD involving the use of chokeholds and training deficiencies. Unfortunately, those recommendations were being rejected by the Police Commissioner. Only recently, with the remedial actions stemming from *Floyd v. City of New York* (2008), has the NYPD been taking such recommendations seriously. At the outcome of *Floyd*, the New York City Council passed Local Law 70, creating the Office of Inspector General (OIG). The OIG is now responsible for external oversight of the NYPD, which is more consistent with type of external auditors outlined by Walker and Archbold (2014). They are working closely with the NYPD to ensure reforms are implemented to reduce racial and ethnic disparities related to SQFs.

Body Worn Cameras and In-Service Training. Resolutions to racial and ethnic disparities in police use of force may be combated through the use of body worn cameras (BWCs). BCWs are small devices worn by officers, typically on their placket. The BWC captures and records activity, creating a permanent digital video recording of police encounters with citizens. Although research on BWCs is still developing, the perceived benefits of BWCs include increased transparency and police legitimacy, improved behavior among both police officers and citizens, reduced citizen complaints and police use of force, and enhanced evidentiary value that leads to higher rates of arrest and

prosecution. To date, a handful of studies have shown promising results for the future of BWCs in American policing. The deployment of BCWs in Phoenix, Arizona, resulted in a 17 percent increase in arrests and a 23 percent reduction in complaints (White, 2013). Furthermore, those police officers who wore a BWC and received a complaint were significantly more likely to have the complaint dismissed and as a result, were less likely to be disciplined. Similarly, research examining the police department in Rialto, California found that after deploying BWCs, there was an 88 percent reduction in citizen complaints against officers and a 58.3 percent reduction in police use of force (Ariel, Farrar, & Sutherland, 2014).

The use of BCWs may also provide opportunities for police training in both the academy and as part of performance evaluations, especially for incidents involving police use of force (Harris, 2010). The anecdotal evidence that exists suggests that BWCs enable officer to assess their behavior and modify it accordingly (Goodall, 2007). The review of video footage may help police departments identify implicit biases that their officers hold towards racial and ethnic minorities. The salience of BCWs to enhance training cannot be understated. The motivation to break implicit bias stems from two sources.

> First, people must be *aware* of their biases and, second, they must be *concerned* about the consequences of their biases before they will be motivated to exert effort to eliminate them. Furthermore, people need to know when biased responses are likely to occur and how to replace those biased responses with responses more consistent with their goals. (Devine, Forscher, Austin, & Cox, 2012, p. 1268)

The use of BCWs has the potential to make officers aware of their biases. Once aware of such biases through BCWs, supervisors must convey the consequences of implicit biases

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so that the police officer is motivated to change their behavior. Importantly, research has

found that awareness of implicit bias motivates and enables individuals to control their

behavior (Devine et al., 2012; Lane, Kang, & Banaji, 2007). To date, there are few police

department that use BWCs for training and evaluation (White, 2014).

Limitations and Avenues for Future Research

The limitations of this study not only constrain the generalizability of the findings

but also provide researchers with future avenues of inquiry. First, reporting biases may

exist because police officers are supposed to fill out a UF-250 form after each SQF

encounters. Police officers may ameliorate the level of force employed on these forms, or

they may not document the incident at all (Rosenfeld & Fornango, 2012; Weisburd et al.,

2014). Systematic social observation or citizen interviews may provide a more complete

understanding of police use of force in the context of SQFs. Second, this study was

unable to control for the rank of the officer. Concerns about rank are a limitation because

rookies may be more likely to employ force due to their inexperience. Moreover, junior

officers may be the ones assigned to high-crime areas, which are predominately

composed of ethnic minorities. Coupled with their inexperience, rookies may be hastier

to employ various forms of force when they have a "hunch" about danger because they

lack the tactical knowledge of a particular location and the people that reside in it. If

available, future research should control for officer rank, especially in the context of

SQFs and police use of force. Third, the minority threat perspective was measured

indirectly through percent Black and percent Latino. A more direct measure of the

minority threat perspective would ask Whites how threatened they feel by increases in the

Black and Latino populations. Fourth, the current study used static measures for percent

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Black and percent Hispanic. In line with Kane and colleagues (2013), future research

should use a dynamic measure of percent Black and percent Hispanic to capture how the

racial and ethnic compositions of precincts changed over time. Fifth, the unit of analysis

for percent Black and percent Hispanic may be too large at the precinct level to detect a

minority-threat effect. Future research should examine smaller units of analysis or pit

various levels of analysis against one another using a cross-classified model. Lastly, this

study relied on one year of data, which rules out discussion about causality. Furthermore,

the findings from 2012 may not be generalizable to more recent years because there have

been drastic changes to the implementation of SQFs since Bratton became Police

Commissioner of the NYPD. By including multiple years of data, future research can

mitigate methodological issues related to causality and generalizability.

Conclusion

Framed within prior research and the minority threat perspective, the results from

chapter 5 reveal several noteworthy findings that have clear theoretical, social, legal, and

departmental implications, which are stated above in the discussion section. These

findings indicate that (1) Blacks and Latinos are more likely to have non-weapon force

used against them in New York City compared to Whites, (2) Blacks are less likely to

have non-weapon force used against them compared to Whites if they are located in

primarily Black precincts, and (3) Latinos are more likely to have non-weapon and

weapon force used against them compared to Whites if they are located in predominately

Latino precincts. Although weapon force only occurred in a fraction of SQF encounters,

they represent a very important percentage because there are far-reaching consequences

associated with higher levels of police use of force. The deaths of Eric Garner in New

York City, Michael Brown in Ferguson, and Freddie Gray in Baltimore all illustrate this point. Coupled with the findings, the implications of this research underscore the need for the NYPD to modify the manner in which they use force in the context of SQFs. As of 2012, the evidence suggests that the NYPD was using force in a racially and ethnically discriminatory manner.

Since 2012, the use of SQFs has dropped precipitously from 532,912 to 45,000 in 2014. The reduction in SQF is largely due to the joint efforts of Mayor de Blasio and Police Commissioner Bratton, who put SQFs at the forefront of their agendas. Such drastic decreases have left some commentators optimistic about the future of SQF in NYC. It may be too soon, however, to hold such positive outlooks on SQFs in NYC. Specifically, the reduction in SQFs does not necessarily reflect changes in the quality of these stops. Police officers, for example, may continue using reasonable, articulable suspicion in a manner that disparately impacts the lives of racial and ethnic minorities and lacks the cornerstones of procedural justice—fairness, respect, and impartiality. The death of Eric Garner in the summer of 2014 highlights this point. For that reason, research must continue examining the progression SQF and police use of force among the NYPD as they continue implementing the remedial actions outlined in *Floyd v. City of New York* (2008).

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APPENDIX A

NYPD UF-250 FORM

UF-250

Front (COMPLETE ALL CAPTIONS)

STOP, QUESTION AND FRISK REPORT WORKSHEET
PD344-151A (Rev. 11-02)

Pct.Serial No.		
Date	Pct. Of Occ.	

Time Of Stop	Period Of Observation Prior To Stop	Radio Run/Sprint #

Address/Intersection Or Cross Streets Of Stop

☐ Inside ☐ Outside	☐ Transit ☐ Housing	Type Of Location Describe:

Specify Which Felony/P.L. Misdemeanor Suspected	Duration Of Stop

What Were Circumstances Which Led To Stop?
(MUST CHECK AT LEAST ONE BOX)

☐ Carrying Objects In Plain View Used In Commission Of Crime e.g., Slim Jim/Pry Bar, etc.
☐ Fits Description.
☐ Actions Indicative Of "Casing" Victim Or Location.
☐ Actions Indicative of Acting As A Lookout.
☐ Suspicious Bulge/Object (Describe)
☐ Other Reasonable Suspicion Of Criminal Activity (Specify)

☐ Actions Indicative Of Engaging In Drug Transaction.
☐ Furtive Movements.
☐ Actions Indicative Of Engaging In Violent Crimes.
☐ Wearing Clothes/Disguises Commonly Used In Commission Of Crime.

Name Of Person Stopped	Nickname/ Street Name	Date Of Birth

Address	Apt. No.	Tel. No.

Identification: ☐ Verbal ☐ Photo I.D. ☐ Refused
☐ Other (Specify)

Sex: ☐ Male ☐ Female   Race: ☐ White ☐ Black ☐ White Hispanic ☐ Black Hispanic ☐ Asian/Pacific Islander ☐ American Indian/Alaskan Native

Age	Height	Weight	Hair	Eyes	Build

Other (Scars, Tattoos, Etc.)

Did Officer Explain Reason For Stop ☐ Yes ☐ No	If No, Explain:

Were Other Persons Stopped/ Questioned/Frisked?	☐ Yes ☐ No	If Yes, List Pct. Serial Nos.

If Physical Force Was Used, Indicate Type:
☐ Hands On Suspect
☐ Suspect On Ground
☐ Pointing Firearm At Suspect
☐ Handcuffing Suspect
☐ Suspect Against Wall/Car
☐ Drawing Firearm
☐ Baton
☐ Pepper Spray
☐ Other (Describe)

Was Suspect Arrested? ☐ Yes ☐ No	Offense	Arrest No.
Was Summons Issued? ☐ Yes ☐ No	Offense	Summons No.
Officer In Uniform? ☐ Yes ☐ No	If No, How Identified? ☐ Shield ☐ I.D. Card ☐ Verbal	

Back

Was Person Frisked? ☐ Yes ☐ No IF YES, MUST CHECK AT LEAST ONE BOX
☐ Inappropriate Attire - Possibly Concealing Weapon
☐ Verbal Threats Of Violence By Suspect
☐ Knowledge Of Suspects Prior Criminal Violent Behavior/Use Of Force/Use Of Weapon
☐ Other Reasonable Suspicion of Weapons (Specify)
☐ Furtive Movements
☐ Actions Indicative Of Engaging In Violent Crimes
☐ Refusal To Comply With Officer's Direction(s)
☐ Leading To Reasonable Fear For Safety
☐ Violent Crime Suspected
☐ Suspicious Bulge/Object (Describe)

Was Person Searched? ☐ Yes ☐ No IF YES, MUST CHECK AT LEAST ONE BOX
☐ Outline Of Weapon ☐ Other Reasonable Suspicion of Weapons (Specify) ☐ Hard Object ☐ Admission Of Weapons Possession

Was Weapon Found? ☐ Yes ☐ No If Yes, Describe: ☐ Pistol/Revolver ☐ Rifle/Shotgun ☐ Assault Weapon ☐ Knife/Cutting Instrument
☐ Machine Gun ☐ Other (Describe)

Was Other Contraband Found? ☐ Yes ☐ No If Yes, Describe Contraband And Location

Demeanor Of Person After Being Stopped

Remarks Made By Person Stopped

Additional Circumstances/Factors: (Check All That Apply)

☐ Report From Victim/Witness
☐ Area Has High Incidence Of Reported Offense Of Type Under Investigation
☐ Time Of Day, Day Of Week, Season Corresponding To Reports Of Criminal Activity
☐ Suspect Is Associating With Persons Known For Their Criminal Activity
☐ Proximity To Crime Location
☐ Other (Describe)

☐ Evasive, False Or Inconsistent Response To Officer's Questions
☐ Changing Direction At Sight Of Officer/Flight
☐ Ongoing Investigations, e.g., Robbery Pattern
☐ Sights And Sounds Of Criminal Activity, e.g., Bloodstains, Ringing Alarms

Pct. Serial No.	Additional Reports Prepared: Complaint Rpt.No.	Juvenile Rpt. No.	Aided Rpt. No.	Other Rpt. (Specify)

REPORTED BY: Rank, Name (Last, First, M.I.)

Print _____ Task# _____
Signature _____ Command _____

REVIEWED BY: Rank, Name (Last, First, M.I.)

Print _____ Task# _____
Signature _____ Command _____

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APPENDIX B

TABLE 4: SUMMARY OF DEPENDENT AND INDEPENDENT VARIABLES

Variable	Coding Scheme	Description
Dependent Variables		
Use of Force Outcome		
No Force	1 = Yes	Dummy variable indicating that the police officer did not use force.
Non-Weapon Force	1 = Yes	Dummy variable indicating that the police officer used non-weapon force (i.e., incidents involving hands, suspect on ground, suspect against wall, and handcuffs)
Weapon Force	1 = Yes	Dummy variable indicating that the police officer used weapon force. (i.e., weapon drawn, weapon pointed, baton, pepper spray, and other)
Independent Variables		
Precinct Level		
Percent Black	Continuous	The racial composition of each precinct for blacks
Percent Hispanic	Continuous	The ethnic composition of each precinct for Hispanics
Concentrated Disadvantage	Continuous	Index composed of percent persons in poverty, percent households receiving public assistance, percent adult unemployment, percent young men (18-25), percent under eighteen, and percent of female-headed households with dependents
Residential Instability	Continuous	Index composed of percent individuals residing in same household for one year, percent foreign born, and percent vacant houses
Violent Crime Rate	Continuous	Reflects NYPD reported homicide, robbery, aggravated assaults and forcible rape per 100,000 citizens
Commanding Officer	3 Dummy Variables	Dummy variable for the commanding officer's rank.
Individual Level		
Race/Ethnicity	6 Dummy Variables	Dummy variable for suspects race/ethnicity, with white being the reference group
Sex	1 = Female	Dummy category for sex
Age	Continuous	Suspect's age at time of stop
Suspect's Height	Continuous	Suspect's height measured in inches
Suspect's Weight	Continuous	Suspect's weight measured in pounds
High Crime Area	1 = Yes	Dummy variable for high crime area
Proximity to Offense	1 = Yes	Suspect's proximity to offense
Radio Run	1 = Yes	SQF prefaced by dispatch

Variable	Coding Scheme	Description
Independent Variables		
Individual Level		
Arrest made	1 = Yes	Dummy variable indicating if an arrest was made
Frisked Suspect	1 = Yes	Dummy variable indicating if suspect was frisked
Searched Suspect	1 = Yes	Dummy variable indicating if suspect was searched
Contraband Found	1 = Yes	Dummy variable indicating if the suspect was carrying contraband (i.e., drugs)
Weapon on Found	1 = Yes	Dummy variable indicating if the suspect had a weapon
Stopped: Fits Description	1 = Yes	Stop initiated because suspect fit a relevant description
Stopped: Engaged in Violence	1 = Yes	Stop initiated because suspect's actions were indicative of engaging in a violent crime.
Frisked: Suspected Weapon	1 = Yes	Frisk initiated because weapon was suspected
Frisked: Suspected Violent Crime	1 = Yes	Frisk initiated because violent crime was suspected
Frisked: Noncompliance	1 = Yes	Frisk initiated because suspect refused to comply with officer's directions
Frisked: Verbal Threats	1 = Yes	Frisk initiated because suspect was verbally threatening

APPENDIX C

TABLE 5: DESCRIPTIVE STATISTICS

Dependent Variables	Min	Max	Mean	SD
Force Outcome (*N* = 519,948)				
No Force	0	1	.858	.349
Non-Weapon Force	0	1	.141	.348
Weapon Force	0	1	.001	.034
Independent Variables				
Precinct Level (*N* = 75)				
Percent Black	.748	88.237	31.523	25.796
Percent Hispanic	6.028	74.292	32.175	21.028
Concentrated Disadvantage	-2.291	1.875	-.003	.999
Residential Instability	-3.159	1.646	.000	1.001
Violent Crime Rate	96.835	1679.409	716.569	376.717
Captain	0	1	.294	.456
Deputy Inspector	0	1	.618	.486
Inspector	0	1	.088	.283
Individual Level (*N* = 519,948)				
White	0	1	.095	.294
Black	0	1	.538	.499
Hispanic	0	1	.312	.463
Asian	0	1	.032	.177
Other	0	1	.015	.122
Sex	0	1	.072	.259
Age	10	98	28.080	11.765
Height	36	95	68.602	3.166
Weight	50	600	168.746	29.776
High Crime Area	0	1	.601	.490
Proximity to Offense	0	1	.225	.418
Radio Run	0	1	.241	.427
Arrested	0	1	.061	.239
Frisked	0	1	.559	.496
Searched	0	1	.083	.276
Contraband Found	0	1	.017	.131
Weapon Found	0	1	.012	.110
S: Fits Description	0	1	.165	.371
S: Engaged in Violence	0	1	.110	.313
F: Suspected Weapon	0	1	.034	.180
F: Suspected Violent Crime	0	1	.130	.336
F: Noncompliance	0	1	.079	.270
F: Verbal Threats	0	1	.006	.078

APPENDIX D

TABLE 12: SQF AND POLICE USE OF FORCE BY PRECINCT

Precinct	Non-Weapon Force	Weapon Force	No Force	Total Number of Stops
1	609	4	2,384	2,997
5	509	3	2,172	2,684
6	807	8	2,644	3,459
7	448	6	2,976	3,430
9	833	5	4,256	5,094
10	449	2	1,863	2,314
13	584	9	3,141	3,734
14	1,073	13	7,665	8,751
17	171	2	1,088	1,261
18	317	6	2,617	2,940
19	467	7	4,052	4,526
20	297	5	2,940	3,242
23	524	3	10,338	10,865
24	561	7	3,578	4,146
25	1,140	2	5,043	6,185
26	674	8	4,597	5,279
28	584	8	5,923	6,515
30	705	8	5,286	5,999
32	3,153	16	7,267	10,436
33	388	5	3,186	3,579
34	1,361	5	7,826	9,192
40	4,911	18	13,062	17,991
41	1,429	3	6,666	8,098
42	1,502	5	5,855	7,362
43	1,314	12	9,109	10,435
44	5,455	12	9,636	15,103
45	549	6	3,346	3,901
46	1,846	13	3,704	5,563
47	1,658	7	7,042	8,707
48	1,159	15	3,831	5,005
49	629	5	5,098	5,732
50	373	6	1,420	1,799
52	2,052	5	7,573	9,630
60	1,210	11	6,389	7,610
61	462	4	6,207	6,673
62	340	3	4,109	4,452
63	518	8	3,128	3,654
66	279	3	3,056	3,338

67	669	10	9,992	10,671
68	187	4	2,352	2,543
69	1,593	2	3,742	5,337
70	1,358	11	9,170	10,539
71	299	20	4,318	4,637
72	588	10	4,567	5,165
73	959	14	20,578	21,551
75	2,162	31	21,529	23,722
76	451	12	4,009	4,472
77	774	12	9,030	9,816
78	136	0	3,023	3,159
79	988	11	13,917	14,916
81	754	14	8,773	9,541
83	1,007	13	10,087	11,107
84	544	5	3,221	3,770
88	314	3	5,489	5,806
90	320	14	9,317	9,651
94	108	0	1,975	2,083
100	561	9	3,552	4,122
101	1,615	27	8,052	9,694
102	1,272	7	5,390	6,669
103	1,945	5	10,833	12,783
104	474	3	4,339	4,816
105	515	12	7,609	8,136
106	467	11	4,505	4,983
107	976	13	3,288	4,277
108	161	6	3,866	4,033
109	1,812	5	7,800	9,617
110	2,050	5	6,942	8,997
111	98	2	3,645	3,745
112	376	1	2,268	2,645
113	951	13	7,683	8,647
114	1,041	10	7,119	8,170
115	2,508	7	5,354	7,869
120	1,439	8	10,834	12,281
122	535	6	5,822	6,363
123	69	0	1,865	1,934
Total	73,416	604	445,928	519,948